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RURAL INDUSTRIES: PROBLEMS AND PROSPECTS

NOTES ON CHINA, 1979

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EDITORIAL - SOME HIGHLIGHTS

I General Economic Scene

State

Climate and Water

The south-west monsoon continued during August with Nilgiris receiving very heavy rains which brought agricultural operations to a stop, put the potato crop under 30 cm. of water, but which also filled the hydel reservoirs in the state, with those at Parambikulam, Aliyar and others surplusing. There were free flows in the Kundah system. By mid-August, the Mettur reservoir crossed the full 36.62 metres level, and two flood warnings were given to those living near the Cauvery banks. From August 13, the outflow of 1.26 lakh cusecs were discharged into the Coloroons. This also means that the irrigation needs of Thanjavur and neighbouring districts are ensured for the whole agricultural year.

Power

As noted above, with the hydel reservoirs surplusing, the power position in August and for the year was good. The daily power generation in August in the hydel areas was a high 24 million units, to which an additional 8 million units were supplied by the Neyveli, Ennore and Basin Bridge thermal stations. The power shortage in all the hydel reservoirs was equivalent to 1,550 Mu. The 2×50 MW units installed in the Kundah fourth stage were utilising the inflows for power generation. The Mettur tunnel and base stations were generating 225 MW. The Tamil Nadu Electricity Board announced a Rs. 14 crores loan redeemable in 1989. It was opened on August 6 and closed immediately as it was over-subscribed. The Board also drew up in August a scheme to provide quick service to consumers in cases of power failure. A central network of telephones will connect sub-stations and important centres, and motorcycles are to be provided for easy mobility.

For the country as a whole, the August power situation recorded improvement in parts with others facing shortages. Following satisfactory rains in Kerala, Karnataka and Tamil Nadu, the power situation in the South improved. In Karnataka, the Rs. 228.23 crore first stage of the giant hydroelectric project went into operation on August 15, generating 910 MW (six units of 135 MW each at Nagihari and two units of 50 MW each at Supadam), and the Sharavathi project ended the cuts on power-intensive units. In Tamil Nadu in addition to the full hydel storage, the Tuticorin thermal station inaugurated in July (see last issue page. 395) adds to its power potential. In AP, with the additions to thermal capacity of 420MW at the Vijayawada station and the completion of work

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on hydel units at Nagarjunasagar and Srisailam the power situation based on growing thermal capacity is satisfactory. Kerala too is augmenting the capacity of Sabarigiri and Idukki and in the Edamalayar project. The demand in the region is however growing even faster, Tamil Nadu's power consumption being equal to the generation in AP and Karnataka, where also the industrial demand is growing apace. The power supply position in the Northern region except in UP, Delhi and Haryana was, in August, of a mixed nature. Delhi region suffered load shedding during the month. During the second half of the month, the severe power cuts in Haryana following the withdrawal of power by the northern grid severely affected agriculture and manufactures which were subjected to a 30-50 per cent cut. When RAPS and Badarpur resume full generation, there will be relief to Haryana. UP's power shortage led to the near closing of 4,000 industrial units due to irregular functioning of the power plants at Harduaganj and Obra. Against the installed capacity of 3,100 MW on August 19, only 1,383 MW were generated, with increases in the power tariff. Punjab also imposed from August a four-hour power cut in urban areas to conserve power for the pumpsets. In the Western region, Maharashtra power shortage is seriously eroding its industrial growth, and MP also reported power cuts in August. In the North Eastern region, Assam faced power shortages. Similarly with the sharp drop in DVC power generation, industrial production in West Bengal and Bihar (Durgapur Steel, Bokaro and the mines) were seriously affected. As a result, the government has decided to increase this year's power generation from 2,500 MW to 2,850 MW. The ministry through its Department of Heavy Industry will meet the power industry's needs as a priority, HEC supplying the coal pulverising or bowling mills, MAMC the shafts and propellers and Jessops and Cruddas the electrostatic precipitation system. The Union, faced with shortage of funds for this expanded power generation programme, is urging the states to raise part of the resources, which is a setback. The coal ministry is planning to instal captive power units in the mines. The power situation, together with transmission losses, is serious, has become a major constraint to the economy's growth and needs national policy measures which at present will be unavailable. REC reports that in August it sanctioned Rs. 4·45 crores for 34 electrification projects in AP, HP, Jammu and Kashmir, Bihar, Gujarat, MP, Maharashtra, Rajasthan and Tamil Nadu.

Coal dumps

To ensure coal availability to thermal plants and industry in the state and to overcome the constraints involved in by the restrictions imposed by the Railways on coal and other movements beyond Waltair, the Union government has agreed to the opening of coal dumps at 3 centres —Coimbatore, Tiruchirapalli and Korrukupet, the sites selected by the study team appointed by the state government. The daily coal consumption of the thermal plants in the state is 1,000 tonnes and these 3 coal dumps would be one means of ensuring regular supply. It would meet in part the problems of grading of coal and shortloading. The precise priority claim of the state units on Singareni coal fields is also under review to meet the state demand for coal.

Regulated markets

At present there are 176 regulated markets, 22 sub-markets and 13 market committees, to which the state plans to add 25 regulated markets during the current year. With a view to providing a regulated market for every 16 km to enable the farming community to market its produce easily, the government has drawn up a Rs. 70.2 crore programme to set up regulated markets in all the 220 potential marketing centres, with World Bank aid.

Housing

The Tamil Nadu Housing Board in August sanctioned the construction of 300 houses and flats for EWS and LIG persons in Teni in Madurai district at a cost of Rs. 27 crores and 112 flats costing Rs. 48 Lakhs for government servants to be posted to the new Periyar district (Erode). It will build 300 flats for the National Textile Corporation workers at Coimbatore for Rs. 1·2 crores. The Board has so far received HUDCO sanction for 122 housing schemes and assistance of Rs. 51 crores, of which Rs. 39 crores are loans. The Board has submitted to HUDCO further schemes for Rs. 10 crores. A working group of HUDCO reporting in August has suggested that state Housing Boards which now tap multiple financial sources and not only grants and loans from the state governments should be given greater autonomy and operational freedom in nominating professionals like architects, engineers, experts in ecology, economists, management and planning experts, and should be allowed to adopt commercial pattern of accounting to arrive at net working results and to appoint cost accountants. The Boards should be empowered to acquire land for their schemes, award lumpsum contracts and develop a planned materials procurement policy for essential items and streamline their procedures on land acquisition, house allotment, materials procurement, etc. to speed their operation. The state government announced in August the earmarking of Rs. 2 crores for slum improvement which will help 15,000 slumfamilies in Madras. This includes grant of land titles to the slum families, house construction, improved roads, water supply and proper lighting. Rs. 50 lakhs are to be spent in opening 15 schools in the slums. Another housing plan concerns the city's 2,500 godowns, of which the majority are in crowded and unsafe locations in George Town. MMDA plans to shift all the godowns to Koyambedu, where the government should construct the godowns to specifications and let them out on hire purchase.

Transport

As forecast in the last issue (p. 397), Madras Port reported in August that with the arrival of the 30 tonnes tyre mounted forklift truck, it is in a position to handle sophisticated cargo like containers. The Port Trust has earmarked 4,000 square metres of land for a container freight station at Jawahar dock to stuff and destuff cargo in the containers.

National

VI Plan

The work on the finalisation of the Draft Plan (1978-83) was completed in August, but with the instability in the Union government and the dissolution of Lok Sabha, the whole process of Plan finalisation has been held up and will have to await the decision of the new government to be formed in December after the general elections. In accordance with the decision of the meeting of the full Planning Commission in July, reported in the last issue, the Deputy Chairman and the Commission revised the Plan as follows: a) the total

public sector outlay of the Plan was increased from Rs. 69,380 crores to Rs. 71,604 crores; b) the Central Plan is Rs. 33,020 crores and the States Plan Rs. 36,609 crores; c) some of the sectoral financial and output targets have been reduced becaues of inflation and the decision to provide half the additional resources only in compensation—irrigation and flood control reduced from Rs. 7,925 crores to Rs. 7,509 crores, power from Rs. 15,750 crores to Rs. 15,363 crores, urban and housing from Rs. 2,540 crores to Rs. 2,242 crores and village and small industries from Rs. 1,410 crores to Rs. 1,388 crores, while agriculture has increased from Rs. 10,325 crores tc Rs. 10,639 crores, transport and communications from Rs. 10,625 crores to Rs. 11,122 crores, industry and minerals from Rs. 13,340 crores to Rs. 13,446 crores and water supply from Rs. 1,580 crores to Rs. 2,453 crores; d) some output targets have been reduced, coal from 149 million tonnes to 143 million tonnes in 1982-83, nitrogenous fertilisers from 41 lakh tonnes to 39 lakh tonnes, steel from 11.80 million tonnes to 11.47 million tonnes, whille some have been raised, cement from 30 to 32 million tonnes, commercial vehicles from 65,000 to 75,000, paper and paper boards from 1.25 to1.35-1.40 million tonnes; e) a much higher effort is built into the revised Plan, the additional resources mobilisation target increased from Rs. 13,000 crores (Rs. 9,000 crores by the Centre and Rs. 4,000 crores by the states) to Rs. 15,664 crores (Rs. 9,850 crores by the Centre and Rs 5,814 crores by the States) as well as increased foreign aid from Rs. 5,954 crores to Rs. 6,454 crores. increased draft on foreign exchange reserves from Rs. 1,180 crores to Rs. 2,219 crores, and increased deficit financing from Rs. 2,226 crores to Rs. 2,961 crores (even this revised target will have been exceeded in the first two years of the Plan;) f) the total private sector's investment has been raised and for the first time will exceed that of the public sector (minus the current Rs. 10,250 crores on ongoing schemes), from Rs. 46,860 crores to Rs. 70,377 crores due mainly to the sharp increase in household savings which the Plan estimates at Rs. 88,816 crores against Rs. 70,919 crores earlier, though the corporate sector's savings are estimated to decline from the original Rs. 9,674 crores to Rs. 8,600 crores. The revised Plan now will be held without decision till late December or early January.

Prices and Inflation

July recorded a further increase in prices, and with no government in position to make policy decisions, it seems wise to plan for an inflationary economy for the balance of the calendar year, with its spillover for a further year. The wholesale price index for July, the week ending July 28 stood at 212.1. This was a rise of 0.5 per cent from the week ending July 21, a rise of 4.5 per cent during the month and an increase of 13.8 per cent compared to the end of July 1978. The index for food articles moved up by 3 per cent due to increased prices of tea, barley, maize, rice, bajra, ragi, dhal, fruit, and vegetables and wheat. In fact, an end-July survey conducted by the Financial Express of prices at the end of July 1978 and 1979 shows that all items—food, clothes, shoes, medicines-rose by 5 to 20 per cent paper and exercise books by 10-25 per cent, sugar by 40 per cent, and so on. The all-India consumer price index confirms this During June, it rose sharply by 4 points to 345 points. Consumer prices are now catching and overtaking wholesale prices. In this situation, the

inflationary forces are stronger than the anti-inflationary decisions and actions. Government-administered prices for steel, coal, and cement were referred to in the last issue, now caprolactum prices have been increased 50 per cent with its spiralling effects on nylon goods; the prices of petrol, kerosene, diesel and cooking gas have been increased, as will be noted later; restricted releases of edible oils and oil seeds by STC and NAFED which have plentiful supplies are pushing up their prices (whether this is due to the tardy procedures of the two agencies or to the slow offtake by the states because of limited credit, transportation and other constraints does not really matter, both push up prices), the decision of the interim government in mid-August to allow the Additional Emoluments Ordinance along with the RBI (Maintenance of Service) Ordinance to lapse, to continue the minimum bonus of 8.33 per cent and maximum of 20 per cent for another year also had an inflationary effect. On August 1, the 12-monthly average of the consumer's price index, which is the basis for determining the DA was just short of 0.5 per cent for the next round of DA which will become due by August end (Rs. 50 crores). In fact since prices began rising from February 24 when the wholesale index was 183.6 to July 28 when it was 212.1 per cent, wholesale prices have risen 15 per cent and the consumers price index is now catching up. Finally the total money supply continues to increase beyond the 18.8 per cent recorded for 1978-79, during which period money supply increased by Rs. 120 crores. There is also the demand of the railway and other departmental workers for bonus. Against these inflationary trends, the rather weak anti-inflationary trends are : a) the RBI action at the end of August in the form of a directive to the Banks to keep cash credit and bill discounts during the period August 23 to December 29 to 80 per cent of the peak level of actual use during the 2 years ending June 1979, limiting refinance against total credit to 30 instead of 50 per cent of the excess over Rs. 2,000 crores and for banks not to increase their resources under participation certificates beyond the July 27, 1979 level. (These are not very effective anti-inflationary controls as the peak under the first directive is already high and there is the escape clause of 10 per cent excess allowed in exceptional cases, the food refinance quota is a weak instrument standing today at Rs. 200 crores and the third directive on participation certificates has some bite, but with bank resources expanding by Rs. 425 crores a month, cannot act as a real break.) The real question is a cutback on credit to government to force it to reduce non-development expenditures and its level of deficit financing and credit to the non-priority commercial sector. The rise in the growth rate of demand deposits and fall in that of time deposits give urgency to using the bank rate instrument and revising the deposit rates. But without a government this will not be possible, the caretaker government has gone as far as it can in negotiating with the Central Government Employees Union to deposit Rs. 18 crores of interest

on their compulsory deposits be paid into their provident fund, while the principal of Rs. 60 crores is disbursed. Hence it seems wise now to plan for an inflationary economy.

State loans

The Union government on August 16 announced 21 state government loans. These new loans bearing an interest of 6.5 per cent will total Rs. 276.75 crores.

Economy and Industry

The review of the economy by NCAER for the first quarter of 1979-80 refers to its strong points of the high food stocks and foreign exchange reserves and the rising industrial growth curve. For the current year it forecasts the GDP growth as that of 1978-79, of 3.5 per cent, with agriculture growing at 2.5 per cent. It points out that as agriculture contributes 43 per cent of GDP, and industrial manufacturing 15.4 per cent, an overall growth of 3.5 per cent in 1979-80 will require an industrial growth of 6.16 per cent, an economic growth of 4.4 per cent will need a 9.7 per cent industrial growth. It forecasts an industrial growth of 6 to 7 per cent for the current year. It also points to the growing intersectoral imbalances such as power failures, coal and coke shortages, inadequate rail transport which is retarding material production and distribution making attainment of even the modest 3.5 per cent economic growth dependent on speedy correction of these imbalances. Its review is dominated by the return of inflation which is ascribed to: a) deficit financing which has passed the Draft five year plan of Rs. 2,000 crores, b) heavy subsidies amounting to Rs. 1,600 crores in 1978-79 (up from Rs. 100 crores in 1970-71), c) the increasing traffic demands together with the decline in railway investment, d) money and credit supplies, e) food stocks which block financial resources, f) shortages of edible oils, cement, newsprint, coal and coke, steel, aluminium,tyres, and tubes including import-exportgap,poor public sector performance and growing industrial sickness. On a global basis, the World Bank's report on basic indicators and world development, 1979 points out that 40 per cent of the world's poorest 800 million live in India, that on the basis of the basic indicators India has slipped from the 18th to the 16th place from the bottom of 140 countries. The Asian low income countries are:

COUNTRY	Population (millions) Mid-1977	Area (thousand square kilo metres)	GNP per capita (US dollars) 1977	GNP per capita: Average annual growth (per cent) 1960 - 77	Adult Literacy Rate (Percent) 1975	Life Expectancy at Birth 1977	Index of Per Capita Food Production 1969-71 — 100	Per Capita Energy Consumption (Kilograms of coal equivalent), Average 1975-77	Per Capita Energy Consumption (Kilograms of coal equivalent), Average 60-76
3. Bangla-desh	81.2	144	90	0.4	22	47	96	—	33
7. Nepal	13.3	141	110	0.2	19	45	95	6	11
14. Burma	31.5	677	140	0.9	67	52	95	55	49
16. India	631.7	3,288	150	1.3	36	51	99	142	218
19. Vietnam	50.6	330	160	—	87	62	100	—	124
20. Afghanis-tan	14.3	647	190	0.2	12	42	102	15	41
21. Pakistan	74.9	804	190	3.0	21	51	101	61	181
25. Sri Lanka	14.1	66	200	2.0	—	69	113	107	106
36. Indonesia	133.5	2,027	300	3.3	62	48	104	129	218

The Bank report also warns of future population pressure, wherein by 2150 AD India would become the most populous country with 1.6 billion people (China will then be 1.5 billion). GDP growth has declined from 3.6 per cent in 1960-70 to 3 per cent in 1970-77, with India falling behind Pakistan and Sri Lanka as the table shows. As far as industrial growth is concerned, the NCAER forecast appears optimistic on the basis of the first quarter performance. While overall output increased by 8 per cent in 1978-79, the April 1979 figures of the index number of industrial production show a decline of 20 per cent (from 167.5 in March to 145.9 in April, though compared to April 1978 there is a rise of 2.9 points). But taking the Industry Ministry's figure for industries with high weightage, in the first quarter steel shows minus 10 per cent growth, coal minus 2 per cent, cement minus 1.3 per cent, paper and newsprint minus 7 per cent, while electricity shows 6.5 per cent increase (against last year's first quarter of 14 per cent), copper 9 per cent, etc. The Railways report a substantial fall in goods and passenger traffic during the first quarter. It looks as if the first quarter's industrial growth will not be more than 1 per cent. Against this background, the government in

August relaxed the licensing restrictions on the expansion and diversification of industries located in cities with a population of more than 5 lakhs. During June, the Ministry of Industry reports that it issued 25 industrial licenses and 31 letters of intent. The IDBI reports that for the first time its annual sanctions for 1978-79 exceeded Rs. 1,000 crores. Also NPC reports that it has reoriented its activities to provide support to rural development and small industries, concentrating on KVIC.

Public sector performance

The performance of the public sector units under the Department of Heavy Industry records the same trends as industry. For the four months April-July, the cumulative production increased at 12 per cent and was Rs. 318.16 crores, being 85 per cent of the target of Rs. 372.30 crores. July production however was lower at Rs. 86.29 crores compared to June at Rs. 88.94 crores. More than half the July output was that of BHEL which was Rs. 48.60 crores and for the four months Rs. 186.40 crores, which was 88 per cent of the target. HMT attained in July 98 per cent of its target at Rs. 14.88 crores and for 4 months was Rs. 50.58 crores. HEC's July production was Rs. 4.20 crores which was lower by Rs. 0.81 crores than its July 1978 output, Jessop's output was Rs. 3.14 crores, 80 per cent of target and MAMC at Rs. 2.38 crores was near the target. Bharat Heavy Vessels and Plates performed at 116 per cent, Tiruveni structurals 108 per cent, Burn and Company 101 per cent and Bharat Pumps and Compressors 100 per cent. All these units except Burn were above target for both July and the 3 months April-June.

National Production Front

Steel

Despite individual plants like Rourkela reporting earning a profit of Rs. 42 crores tn 1978-79, the overall steel production for the year will be less than the reduced target of 7.4 million tonnes. The 8 per cent cut-back in steel output will not be put back as one means of conserving coal stocks. It is reported that in the first 3 months, April to June, owing to irregular supply of coal and power, steel production losses amounted to 1.4. lakh tonnes. A serious shortage in several categories of finished steel has already occurred due to declining domestic output and lack of advance planning of steel imports, so that market prices of rods and bars have begun to rise in response to growing demand. The Ministry reports that it is planning to increase steel availability for the second quarter July-September by 603,500 tonnes more than in the corresponding 1978 quarter, of which 4,32,500 tonnes will be imports arriving in July-September. The major part will be plates, structurals, HR coils, sheets and semis and 19,000 tonnes more of bars and rods and 14,000 tonnes more of electrical steel sheets. Coking coal reserves with the integrated steel plants are very low and to meet this issue the Southern Railway reports that it will transport imported coking coal from all ports to the steel plants on top priority. Also to increase the use of non-coking coal for steel-making, SAIL has entered into collaboration arrangements for the use of briquetted non-coking coal. The Ministry is of the view that Engineering Export Promotion Council's demand forecast for steel in 1979-80 at 4.96 lakh tonnes for the export target of Rs. 850 crores was exaggerated as the offtake had only been 1.73 lakh tonnes for

Rs. 685 crores exports. On the Vizag steel plant, the ministry reports a tight time schedule involving the completion of the first 1.2 million tonnes stage in 4 years and the second 3 3 million tonnes stage in the following 2 years. The plant will specialise in the production of billets and light structurals. Civil works are to commence on November 1, and on the basis of the report of the consultants, Dastur and Company, the budget allocation for the year will be made. The plan to set up a chain of coastal steel plants with foreign assistance is now held in abeyance until the new government takes office next year. The ministry also reports that failure to keep abreast of the latest technology (no fresh investments have been made on production and processing techniques for special and stainless steel) has made Durgapur's ASP uncertain as to its future. SAIL reports that it will release directly steel to small scale units that require more than 200 tonnes per quarter. Also boiler quality plants and non-grain oriented cold rolled electrical sheets are to be placed on OGL to increase their availability.

Crude

On August 16, in response to the OPEC price rise reported in the last two issues (pp. 356, 399 and 402) the price of petrol was increased by 35 paise per litre, light diesel by 32 paise per litre, kerosene and high speed diesel by 17 paise per litre, cooking gas by Rs. 5 per cylinder of 15 kg, fuel oil by 32 paise per litre, aviation fuel by 74 paise per litre, naphtha by 1.47 per kg. and bitumen by 50 paise per kg. To keep the price increase down, the government has treated the additional excise duty on kerosene, HSD, petrol and cooking gas in the 1979-80 budget (see. vol. IX, p. 188.) as part of this price increase. These duties estimated to yield Rs. 280 crores will now not go to the government as revenue but to the oil industry. The new price rise will yield Rs. 870 crores and together with the above Rs. 280 crores, will cover the additional cost of Rs. 1,150 crores of crude this year. Naphtha, fuel oil and low sulphur heavy stock used as feedstock for the fertiliser industry have been left untouched. Bombay High is now producing at the rate of 95,000 to 1 lakh barrels per day and for 1979-80, will produce 4.40 million tonnes, going up to 9 million tonnes in 1982-83. In the present emergency, next year's Bombay High target must be 7 million tonnes. Oil India has secured services of self propelled drill ships for its programme of wells drilling in Mahanadi basin near Orissa. The offshore drilling rig will begin operation in November. ONGC will drill at least one deep well in Tripura with the help of Russian experts to explore that state's oil resources. On imported crude, a Union government expert committee has recommended that laboratories of the Central Excise should follow a uniform policy in testing imported crude processed by all refineries; transit losses in petroleum products movements should be studied and corrected, as in the case of Soviet transhipment where the losses are high at 3 per cent, and the number of laboratories and their testing facilities and equipment should be increased. With the announcement of the price rise, the refineries should now work viably and fully and the kind of breakdown of the refractory plant in the Cochin Refinery, which led to a shortage of petroleum products, particularly furnace oil, in the South, avoided. Now economy in the use of crude and its products and the search for alternative energy sources have become urgent for the country. Ambassador and Fiat cars are being

readied to run on ethyl alcohol, on the basis of field trials at IIT, Delhi, Engineering College, Guindy and IIT, Madras. The ministry of energy is pushing the use of coal to substitute for oil and decentralised village level power sources based on agro, forestry, vegetable wastes and gobar gas (see vol. IX, pp. 116-121). Solar energy which has made a start in the country as well as wind, tidal and geothermal energy on a more limited scale are also being explored. The country's petroleum products requirement for this year are estimated at 31.5 million tonnes against last year's 26.5 million tonnes and domestic production at 9.6 million tonnes (against last year's 7.5 million tonnes). Alternative sources must narrow this gap. Libya has refused crude supply of 1 million tonnes and this further makes alternatives and economy urgent.

Coal

Coal shortages affecting thermal and steel plants have been referred to. CCL, a subsidiary of Coal India is planning to increase its production from this year's 23 million tonnes to 65 million tonnes by the end of the VII plan. Including 17 ongoing reorganisation schemes, the total cost will be Rs. 257 crores. Rs. 7 crores have been invested in mechanised coal handling plants and 10 new coal handling plants at a cost of Rs. 22 crores are under construction. The number of railway sidings have been increased from 12 to 20 and 15 new sidings are being constructed at a cost of Rs. 4.2 crores. The quality of coal is being improved through the 4 washeries, with an installed capacity of 9.31 million tonnes for beneficiating coal for the steel plants, with 2 more washeries under construction. For the industry as a whole, there is need for more purposeful direction, intensive monitoring of production schedules, increased supply of explosives, both domestically (a new explosive plant at Bhandara in Maharashtra with 5,000 tonnes capacity will start its trial run in September) and captive power plants referred to earlier plus the other inputs such as steel rails, flats and sheets whose demand should be planned at least one year in advance.

Non-ferrous metals

The supply of non-ferrous metals for this year will be limited. Copper demand for the year is estimated at 75,000-80,000. tonnes against domestic supply of 31,000 tonnes. The demand for zinc is estimated at 1.15 to 1.20 lakh tonnes and the domestic production at 73,500 tonnes. Besides pushing forward with exploration and production of copper, zinc and lead, the government has instructed MMTC to import the metals to cover the supply-demand gap. Only with regard to aluminium is the situation more hopeful. Against the estimated demand of 3.25 lakh tonnes of aluminium for the current year, production is expected to be 2.48 lakh tonnes. Even here there is under-utilisation of smelter capacity due to power shortage and to cover the gap, the government has decided to waive the customs and countervailing import duty on imported aluminium. With a view to exploring and exploiting the large bauxite deposits in the east coast, feasibility studies have been commissioned by BALCO with Aluminium Picheney of France for the Orissa deposits to develop a 6,00,000-8,00,000 tonnes plant and with Tsvetmetprom Export of the USSR on the AP deposits for another 6,00,000 tonnes plant.

Engineering goods and Newsprint

A study by the Association of Indian Engineering Industry reports that cost inflation has reduced the profitability of the engineering industry from 12.4 to 10 per cent and reduced the number of profit-making companies from 92 to 88. The increased cost items are raw materials, electricity by 2.6 per cent, kerosene by 7.3 per cent, petrol by 13.8 per cent, diesel by 7.7 per cent, as well as labour construction and maintenance, railway, shipping and financing. The study covered the top 100 engineering companies and found that among raw materials, the sharpest rises were in semis (27 per cent), bars and rods (30.4 per cent), structurals (23.8 per cent), lead (44.8 per cent), zinc (11.2 per cent) and tin (2.1 per cent). The largest cost increases were in Bangalore followed by Madras and Delhi. Similarly over 50,000 small scale engineering units like mini-steel rerollers, steel tubes, auto parts, bicycles, sewing machines, nuts, bolts and wire drawing; in the Northern region, HP, Haryana, Punjab and Delhi are finding it difficult to get raw materials at even the high prices and above 50 per cent of them are closing or facing closure. On the newsprint front because of strikes in North America, the international newsprint market is in a tight position. India, which depends on imports for 3 lakh tonnes out of its total consumption of 3.41 lakh tonnes is in a difficult situation. STC however has assured the consumers that 98 per cent of imports for the year are covered by firm contracts and the requirements of the industry would be fully met. However the newsprint purchasing committee records various periodic shortfalls between the demand and availability, the most recent being in July when the gap recorded is 42,360 tonnes. The government should draw down on its buffer to meet these shortages.

Sugar and edible oils

Despite governmental action to restrain sugar prices reported in the last issue (p.403-404) sugar prices continued to rise in August. As the festival season draws near, the government reports exploitation and hoarding by the factories and traders. The August release was a very high 6 lakh tonnes but price rose from Rs. 10 to 12 per quintal. The quota of 6.55 lakh tonnes released for July was not lifted in full and about 50,000 tonnes were allowed to lapse. The government issued notices to 135 mills for contravening the order by not despatching the entire release during June, but the mills continue their speculation and hoarding with the help of the traders. The industry as usual put the blame for the price rise on traders and consumers, as the price fall in August was a small 2 per cent. On sugar prices, the caretaker government can and should take restraining action. ISMA reports that sugar production in 1978-79 will decrease by about 48 lakh tonnes from the previous year's 60 million tonnes. This will also affect cane production which has for two years stood at 182 million tonnes. For the current year production estimates are at 170 million tonnes because of the fall in the cane area from 32.20 lakh hectares last year to 30.71 lakh hectares this year. APC has recommended a statutory minimum price of Rs. 10 a quintal in the 1979-80 season which is the same as that of last year. It also wants that cane supplied to Khandasari units which is 58 per cent of the total cane production should have a regulated price — the white sugar-producing mills take 30 per cent of the cane crop and the residual 12 per cent is used for seed, etc. This will give the cane growers a firm base to plan their crop and is the logic of the VI Plan target of 207 million tonnes of cane production. With regard to edible oils, the government

has released some quantities to state governments for sale through FP shops, maintained through STC a regular supply of vanaspati units. The government reports that it will have a stock of 6.20 lakh tonnes in STC imports for the lean season which should bring prices down. August did not see such a decline; theJuly rise was between 3 to 4 per cent.

Textiles and Soda Ash

NTC reports losses during the past four months of Rs. 5 crores when it operated the price roll-back scheme (see vol. IX, p. 358) and the industry as a whole has begun a concerted demand to drop the scheme. Even for NTC it is not clear whether its losses are due to the roll-back prices or because of strikes, power cuts, wage increases, increased cost of coal and electricity. The Union government reports that it is considering extending the roll-back scheme for a further 2 months till October end, reintroducing the stamping of retail prices on common cloth varieties to halt further price hikes. On soda ash, the twin problems of short supply and rising prices have been and are under expert review. The production in 1977-78 was 5.72 lakh tonnes against the installed capacity of 6.33 lakh tonnes, with fresh capacity approvals of 5.64 lakh tonnes, which should make the plan targets of 9.33 lakh tonnes capacity and 8.3 lakh tonnes production possible. Against this picture of self-sufficiency, the problem is to meet immediate shortages and hold back on price rises, and on this a government committee is at work. For the present, the committee should import to build a buffer of 20,000 tonnes which can meet immediate supply deficiencies.

Fertilisers

The Fertiliser Association of India reports that the consumption of chemical fertilisers for 1979-80 is estimated at 5.79 million tonnes, a growth rate of 13.3 per cent over the previous year. The estimated production of fertilisers this year will be 2.65 million tonnes of nitrogen and 0.84 million tonnes of phosphates, with import of the entire requirement of phosphates. New units at Bhatinda, Panipat, Sindri, Ramagundam, Talcher, Haldia and Phulpur are scheduled to start commercial production this year. The Rs. 200 crore Talcher plant had its first trial run in mid-August. This is the world's first and largest coal-based fertiliser plant and on its success in producing ammonia commercially, considerable saving in the use of crude depends.

Agricultural Production

It is difficult to forecast the final outcome of the present crop season. On the one hand FCI reports a record procurement of 8 million tonnes of wheat during the current rabi season and an overflow of its buffer with 22 million tonnes. It will be recalled that the 1978-79 kharif procurement was 6 million tonnes of rice. The total stocks held by FCI comprise 11.5 million tonnes of wheat, 9.7 million tonnes of rice and some quantity of coarse grain. On the other hand, the monsoon reports have been one of shortfall in some areas. The South, as noted earlier, except for parts of Andhra Pradesh, has had its full monsoon. So have Assam, Arunachal Pradesh, West Bengal Rajasthan, MP and Gujarat. The Morvi dam burst in Gujarat in mid-August led to heavy loss of life. Punjab, Haryana, UP, Jammu and Kashmir and Bihar face 30 per cent deficit as at the end of August, which could still be made up by rains in early September. Jullunder district reports that the kharif crops of paddy, maize and groundnut have suffered a loss of 12 to 40 per cent due to

the failure of monsoon to which diesel shortage, which made difficult the use of tube wells, should be added. It the rains do not pick up, the paddy, oil seeds and jute crop will be affected and the rabi sowing delayed. On this basis it is estimated that the 1979-80 crop may be of the order of 127 million tonnes, against the 130.5 million tonnes in 1978-79. The deficit of 3.5 million tonnes will not make a dent on supply or prices because of the bulging buffer stock. Besides rabi crop becoming independent of weather, the scheme of raisng nurseries in irrigated pockets for transplantation to other areas during rains which was started 2 years ago and is now widespread, has helped to stabilise paddy production. The Union government has suggested to the states a national minimum yield guarantee project for rice, wheat, pulses and oil seeds, involving identifying compact areas where farmers could be helped to attain the targets of 3 tonnes of paddy per hectare, or 2.5 tonnes of wheat, or 2.5 tonnes of Bengal gram and groundnut per hectare, assessing their credit needs and making available to them the needed inputs. For this purpose Rs. 3,000 crores for field level investment in 1979-80 are available and the rural youth training programme, increased irrigation and rural godowns are parts of the scheme. A government survey of the Small Farmers Development Agency reports that in the 8 years of its existence, one-eighth of small farmers (6.448 million) have benefited. The total number of small farmers are 52 million, of whom 13 million are eligible for participation. If the programme is to cover all small farmers in a decade, the annual coverage must increase by 4 million (at the present rate it will take 43 years). The average small farmer has received Rs. 200, 86 per cent of which has been for productive medium and long term investment. A study of 34 projects showed that the small farmer was able to increase his family income by Rs. 1,017, minor irrigation added Rs. 1,670 and dairy Rs. 879 as extra income per household. To make credit available, commercial banks expanded their sphere to provide 29 per cent of institutional finance. This should be further pushed along with the differential interest scheme in order to cover a wider group of small farmers. Some university studies on SFDA operations are needed to check these important conclusions.

Exports

The ministry of commerce reports that while the first quarter of 1978-79 recorded a surplus trade balance of Rs. 56 crores, the first quarter of this year 1979-80, April-June shows a deficit of Rs. 262.43 crores. This was in the main due to the sharp increase in imports which in June amounted to Rs. 810.55 crores bringing the total imports for April-June to Rs. 1,724.55 crores (compared to Rs. 1,110 crores in the first quarter of 1979-80). Exports, however, have been registering a 7-8 per cent growth, and if the new government reviews and curbs the import liberalisations policy, there could be a better balance between exports and imports. On the exports side, India could double its polyster, polyster cotton blended fabrics to EEC countries by fully meeting its quota and the replenishment scheme. Jute goods exports are in strong demand and with higher international prices, the export cash assistance to hessian was withdrawn and for carpet backing cut from 10 to 5 per cent in August end. They are expected to earn Rs. 250 crores. Punjab along with Tamil Nadu is planning to export rice and has been granted by the Union government a permit for the export of 30,000 tonnes of PR-105 rice to West Asia. Cardamom exports,

which a decade ago earned Rs. 7 crores, will this year fetch Rs. 70 crores from exports, and the addition of Iran, US, Canada and Japan to the traditional markets will help the Cardamom Board to attain its target of Rs. 100 crores. The Engineering Export Promotion Council, despite the cost push faced by the industry, as noted earlier, is planning an export target of Rs. 850 crores for 1979-80 (against last year's Rs. 700 crores) and to increase exports by 25 per cent annually to attain an export of Rs. 10,000 crores by 1990-91. On the other hand the export of raw tobacco which declined from 75.4 million kg in 1977-78 to 68.8 million kg in 1978-79 and from Rs. 110.61 crores to Rs. 107.65 crores due to world recession, expects increased exports in 1979-80, and for this the hectarage is being increased in AP, Karnataka, UP, Gujarat and Tamil Nadu.

Aid

Canada and India signed an agreement in August under which Canada will supply India with rape seed oil worth Rs. 10.5 crores plus Rs. 3.5 crores to cover its shipping cost. UK and India signed an agreement providing a grant of Rs. 54.8 crores from the UK to finance the costs of Indian development projects.

International

Bangladesh

Bangladesh in August cut sharply the export prices of jute cuttings and maesta in order to dispose of the large unsold stocks piling up with the mills. The outstripping of the world demand for jute goods has changed the relations between Indian and Bangladesh mills who were competitors but are now complementary to each other. The present boom in world jute goods demand has cleared the stocks in Bangladesh (Africa takes most of its jute cuttings) and as noted earlier, has increased export earnings for both countries.

China

China, and India have agreed for Indian cotton export to China of 32,000 bales. China has shown a preference for Tamil Nadu's long staple Varalakshmi and MCU-5 of counts 60s and 80s, so that 25,000 bales of the cotton exports will be from Tamil Nadu. India's large cotton stock position — 76 lakh bales production in 1978-79 plus a carry-over stock of 16 lakh bales—is the basis for this export effort. China imports 2.4 million bales mainly from US, Mexico and Central America and India is now entering this circle.

World monetary reform

IMF is completing preparation of a plan to create what is called Substitution Account under which unwanted US dollars will be exchanged for a new international asset backed by US government securities. This will remove some dollars from the international monetary system and replace them with an asset that will have a more stable value than the US dollar. The substitution account will strengthen the international monetary system by making it less vulnerable to stocks arriving from the unstable US dollar. The plan will come up for approval at the October annual meeting of the Fund/Bank and will be strongly supported by EEC, Japan and the OPEC countries who hold an embarrassing amount of dollars and are worried about its losing value. This is the moment for the developing countries to bargain for the SDR link to development assistance in exchange for supporting the Substitution Account. In its annual report, IMF notes that developed countries are adopting

various forms of import restraints and calls on them to cut back on their growing protectionism for expansion of their trade and economies and to help to the economic growth of developing countries. Protectionism is severe in steel, shipbuilding, textiles and small scale electrical equipment. While India, Korea, Sri Lanka and Mexico have made progress in trade liberalisation, Austria, Canada and US have increased their protectionist tariff unlike France, Norway, and Japan.

UN Law of the Sea Conference

The eighth session of the UN Law of the Sea Conference which began in July for 6 weeks ended on August 26. There is still continuing deadlock on the means of using the riches of the ocean between the industrialised and developing countries. Some minor progress was made in authorising 350 nautical miles as the continental shelf depending on the depth of the shelf. Negotiations which made some progress included the curbs on production of sea mineral resources such as copper, nickel and manganese, and on the financial clauses of the contract that ISBA will grant to states or companies capable of exploring and mining these resources. The differences between the two groups of countries continued with regard to the means of financing the first site of nodule mining by ISBA and on the revised negotiating text of the Draft convention. The only agreement was to meet again in New York in March 1980 and in late 1980 or early 1981 in Geneva, with the hope of having an agreed treaty that will be signed at the final session in Caracas, Venezuela.

World Economy and Poverty

Besides the IMF report on the World Economy referred to above which points to the 1977 growth of 3.75 per cent ot the wealthy countries and $ 32 billion balance of payment deficit of the poor non-oil countries in 1978 which will increase in 1979, the World Bank's World Development Report, also referred to earlier, calls attention to the importance of the agriculture sector for the developing countries, which sector suffers from artificially low prices to agricultural producers, taxation of agricultural exports, over-valued exchange rate, heavy protection to manufactures including those purchased by the rural sector and other measures which have turned the domestic terms of trade against agriculture. One way out is for lower protectionism in industrialised countries and an expanded policy of agricultural exports from the developing countries. The report commends rolling plans as one means of introducing the flexibility to match planning demands with the limited expertise available. On industrialisation, leaving aside its inappropriate emphasis on what is called appropriate technology, it calls attention to the artificially bloated costs of purchasing technology by the developing countries through MNC contract clauses that restrict the buyers' exports and require purchases of imported inputs from the supplier. Foreign trade for the developing countries is under a cloud as far as the Tokyo round is concerned. Manufacture exports from the developing countries have slowed from 1977 and aid from the industrialised countries which is at present 0.32 per cent of their combined GNP will reach 0.35 per cent by 1990. On the hopeful side the report states that world oil production which will reach its peak by the end of the century calls for the next 2 decades being devoted to developing post-oil energy sources. With the declining fertility rates and increase in agricultural production, the middle income countries could have a 3 per cent GNP per capita growth. If trade,

aid and capital flows are liberalised, its high scenario with 3.3 per cent annual expansion of agricultural exports and 13.1 per cent of manufactures, a rise in ODA to 0.45 by 1990, reduction of the poverty sector to 350 million (against the present 800 million) can come about. There is still the problem for the developing countries of the explosive increase in the labour force (in the next 20 years, half a billion more people will be looking for jobs in these countries) and increased urban migration, with its 20 cities with 5 million population and 20 megacities with 10 million and above. If the low scenario occurs, the number of poor at the end of the century will be 710 million. FAO's World Bank Council report which defines hunger as diminished ability to work, to cope with infection, to enjoy the normal satisfactions of life and raise and educate healthy children states that over one billion people are not getting enough food and over 450 million are suffering from severe malnutrition. It points out that if present food supplies were distributed equitably, the hungry people could be fed. Feeding the 450 million who are severely undernourished will take only 40-60 million tonnes of wheat, which is 3-5 per cent of current world cereal consumption or 10-15 per cent cereals now being fed to livestock in developed countries. It also calls for a UN code of ethics on the advertising and marketing of infant foods, where MNCs advertising have led to decline in breast feeding, which is the most nutritious baby food.

World Food

FAO's early warning system reports that food crop conditions are unfavourable in 31 countries—which is double the number reported last year. Among them, 27 are developing countries. There is some improvement in wheat production outlook due to favourable weather in important producing countries, so that world wheat output may touch 417 million tonnes in 1979, with a major shortfall in the USSR. World coarse grain production is forecast at 727 million tonnes (31 million tonnes below last year's crop); world exports of wheat and coarase grain will meet import requirements, if exporters' shipping facilities are adequate. It also forecasts a further increase in world production and export availabilities of oil seeds in 1979-80. International dairy supplies continue to exceed substantially commercial outlets, mainly because of the massive surpluses of EEC in regard to butter stocks, though its large skimmed milk stock is declining and prices are hardening. In this FAO forecast, India emerges as an exporter of 500,000 tonnes of rice in 1979-80 due to bumper production, higher procurement, lower public distribution offtake and pressure on storage space.

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II Agricultural Development

Paddy and other crops

As against 1978-79 foodgrain production in the state of 87.25 lakh tonnes, the 1979-80 target is 88 73 lakh tonnes of foodgrains and 36.75 lakh tonnes of commercial crops. Of the foodgrains target, the rice target is 65 lakh tonnes and millet target is 20.15 lakh tonnes. Rice production using HYV and hybrids and extending them to new areas will be increased from 22 40 lakh hectares in 1978-79 to 22.80 lakh hectares this year, while at the same time reducing the area under rice from 27 lakh hectares to 26.5 lakh hectares in order to release 50,000 hectares to groundnut production and cotton. The latter will be increased from 3.75 lakh bales to 4.40 lakh bales by expanding the area from 2.90 lakh hectares to 3.50 lakh hectares. The area under sugarcane will be stabilised at 1.45 lakh hectares, all using HYV. The poor man's tractor is coming into wide use for sowing, fertilisers placement and intercultivation. One-third of the total production of rice from the state is raised in the district of Thanjavur, where the Department has proposed that 4.60 lakh acres should come under Kuruvai, 6.80 lakh acres under Samba and 3.90 lakh acres under Thaladi, with 99 per cent of the area coming under HYV. Kuruvai cultivation this year was 60,000 acres short of the target, mainly due to lack of credit. Rs. 79 crores is computed as the total credit need of the district farmers, of which Rs. 32 crores is from the financial institutions. Though cooperative credit should provide two-thirds of the credit requirement, this year of the Rs. 141 crores disbursed by co-operatives, Thanjavur has been allocated Rs. 25 crores and to date only Rs. 1 crore has been disbursed due to non-repayment of last year's loans. There is here a real bottleneck which banks cannot overcome however generous they may be in interpreting their instructions on jewel loans or priority sector. To enable the farmers to benefit from the higher paddy price (Rs. 20), marketing facilities should be extended and made adequate.

Rice export

Like Punjab, Tamil Nadu has been given a Union license to export rice. Negotiations are under way with West Asian and European countries who want Tamil Nadu rice. The steady increase in rice output from 53 lakh tonnes to 65 lakh tonnes in the last two years, due to intensive cultivation practices and switchover to short term varieties has made export of rice possible. As noted earlier, the emphasis is increased productivity per unit of land which has also made possible switching part of the land to other equally urgently needed crops.

Research results

A new rice variety Panidhan-2. has been developed for low lying areas where water stagnates. It has improved grain quality, is resistant to pests and diseases, matures 10-15 days earlier than other varieties and is a good yielder at 29.34 quintals per hectare. In August, the Tamil Nadu Agricultural University released a new paddy variety, Kodai Kichadi, which can be raised in 100 to 105 days (January-March or April-August), using half the usual dosage of nitrogen. It also released a new groundnut variety, CO-1, with an yield of 1,000 kg per hectare under rainfed and 2,500 kg under irrigated conditions It has a duration of 100-105 days and oil content of 50.4 per cent. The university.

has experimented with means of minimising the dreaded bunchy top suffered by the Palani Hill banana plantations. Removing the diseased plants after pouring kerosene every week and spraying with methyl demeton stops the disease. Experiments at the Thadian Kudisai Station with injection of pesticide or weedicide into the plant also were successful. Similarly injections of pesticides into the trunk of coconut trees controlled the spread of blackheaded carterpillars and the rat menace to young palms as a result of experiments conducted at the Agricultural Research Centre at Vaniyambadi. This injection method is now spreading in Salem and North Arcot districts coconut groves. ICRISAT research has made available high yielding hybrid red gram which is a heavy and early yielder. Similarly, the hybrid pearl millet it has produced is resistant to downy mildew disease, is drought-resistant and has upgraded nutritional value. In chickpea, early flowering varieties have been developed which reduce the growth period by half and speeds the breeding programme. Research at CFTRI, Mysore has demonstrated that protein from algae lowers the cholesterol level in the body and so the state government has launched a massive promotional programme to bring 2.5 lakh acres of paddy under blue green algae application during this year. The needed (algae) material is being produced in the state seed farms, block offices and farmers holdings. Another programme is the use of sea seeds as fuel, feed and fertilisers. Using the research results of Japan, Chawki rearing centres which rear young age silk worms immediately after hatching to prepare them for efficient cocoon production, the sericulture department in Karnataka and Tamil Nadu are adapting these results to stabilise cocoon crops and get yields of 45 to 55 kg. per 100 layings. Perhaps there is a lesson and warning for us in India in the fact that increasingly US farmers who were using heavy doses of chemical fertilisers are returning to use of organic manures — animal manure, sewage sludge, green manure—to counter the toxic effect of the chemicals — a movement called organic farming.

Vegetables

To bring down vegetable prices and increase their availability, ICAR has sanctioned a Rs 85 lakhs scheme to expand vegetable cultivation in the city's suburbs. The amount is being used in the Chingleput district to grant loans and subsidies and supply inputs for intensive vegetable growing over 10,000 acres to be expanded later to 50,000 acres. 1.5 lakh seed packets are being distributed.

Dairy farming

The twelfth quinquennial livestock census conducted in the state from June 1 to July 14, 1977 shows a decline of 0.17 per cent in the state's cattle population from 1,05,72,378 in 1974 to 1,05,54,568 in 1977, probably due to drought conditions in some parts during those years and due to castration of scrub bulls. Buffalloes, however, increased from 28,53,253 to 29,58,069 or 3.67 per cent due to the encouragement given to farmers to rear milch animals as part of dairy development. Pigs also increased by 13.93 per cent, goats by 6.95 per cent, while the sheep population declined by 4.02 per cent.

Tea

Tea production this year is likely to be lower than last year's 571 million kg. In July, tea production declined by 2.5 million kg. and in the South by half a million kg. The overall shortfall this year amounts

to 22 million kg. Assam reports that its tea gardens are caught in a drought situation and it looks as if the 1979 production will be that of 1977 at 560 million kg. The President of UPASI refers to the financial difficulties of the plantations due to fall in production, reduction in export, decline in prices and rising costs. This jumble of causes needs to be studied carefully and action taken to correct lagging trends. As far as exports are concerned, the first quarter reports show that tea exports have increased by 33 per cent over the target of 33.08 million kg., having reached 43.24 million kg. in April-June and on this basis could reach 220 million kg. for the year. The Soviet Union has placed a large order of Rs. 1 crore for Indian tea in August. On the basis of the Indo-Sri Lanka agreement, trial shipments of tea in a new type of container began simultaneously from Sri Lanka and India. The new packing box, called corrugated fibre board containers, has been developed by the Indian Tea Board, is made of seven-ply craft paper and ply wood as a means of economising on scarce timber and yet withstands the stresses and strains of the sea journey.

Coffee and Rubber

Market reports in August indicate that coffee exports are increasing at steadily rising prices. World coffee prices were also steady with a good coffee crop assured in Brazil, the major exporter, followed by Kenya. STC reports in August that it allotted 22,000 tonnes of imported rubber during April-August, meeting all indents received by it from the industry. As part of the 45,000 tonnes rubber import approved by government, another 8,000 tonnes are being imported directly by the Industry. International prices during this period increased by $ 200 per tonne and hence Indian rubber prices rose from Rs. 10,000 to Rs. 12,700 per tonne. Indian industry needs 15,000 tonnes of rubber and indigenous production meets the needs except for 3 months, which shortfall is met by imports.

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III Industrial Development

Salem steel

The Union government and the Salem steel plant management referred in August plan to double Salem Steel's capacity by installing a second cold rolling mill at a cost of Rs. 27 crores. The plan has been cleared by SAIL and is now before the PIB before being submitted to the government. In the first stage it would turn out 32,000 tonnes of finished stainless steel strips through cold rolling. Before that it would either import or procure hot rolled coils from indigenous sources but ultimately it would become an integrated plant as originally conceived at a total cost of Rs. 560 crores MECON is supplying the plant a Rs. 6 5 crores skinpass rolling mill for rolling stainless steel rolling strips. It must be admitted that some of these promises, such as the return to the integrated

plant proposal cannot be taken seriously in the absence of a government and in the atmosphere of electioneering.

Neyveli

NLC reports that production at its fertiliser unit has switched over completely from lignite to fuel oil as feedstock and has stabilised its urea production at more than its rated capacity of 1,52,000 tonnes (115 per cent of capacity). Due to delay in arrival of some imported materials, the conversion which should have started operation in October 1978 has been delayed till August but with the receipt and installing of the equipment, the plants stabilised operation commenced in a record 25 days. The plant had started making profit from November 1977, and now with 100 per cent capacity production assured the accumulated losses of Rs. 30 crores should be repaid in 5 years when the second mine is ready, and it is proposed to start another plant with 1,52,000 tonnes of urea capacity. As far as the power plant is concerned, when the first mine's lignite production is stabilised at 6.5 million tonnes, one more power plant of 100 MW or 200 MW is to be set up. In the long run, there could be 4 or 5 mines each yielding six or seven million tonnes —over a century, tapping the reserves of 2,200 million tonnes of lignite.

BHEL and MFL

The BHEL - Siemens draft agreement (see Vol. IX, p. 315) is now involved in the government quiescence. The Foreign Investment Board to which the agreement was referred had not completed its study and review. The Committee of Secretaries have expressed their opposition to parts of the agreement and prefers a product-to-product technical collaboration with different groups. In any case with the present care-taker cabinet now in office the proposed agreement is for the moment set aside. Madras Fertilisers reports 4½ years of continuous safe operation. The American Safety Council has ranked MFL at the top of the world 100 chemical and fertiliser plants for safety. This achievement is the result of combined job safety procedures, provision and use of quality protection equipment, thorough job training and technical capacity of staff engaged in continuous systematic inspection of the plant.

TIIC

The Tamil Nadu Industrial Investment Corporation reports in August launching two new schemes to help weaker sections. In one scheme a term loan of upto Rs. 25,000 with a margin of 15 per cent and interest rate of 11.5 per cent will be given for purchase of a single auto truck-trailer. The margin however is too large for one from a really weaker section. A second scheme makes available loan of upto Rs. 25,000 at 9 per cent and for 20 per cent of the cost, 1 per cent interest. The loan can be used for both fixed assets and working capital. It has raised the loan limit for rural medical practitioners setting up clinics and polyclinics from Rs. 1 lakh to Rs. 2 lakhs. More generally, Tamil Nadu with 73.393 small units leads all states in bank assistance to small units.

Engineering units

Similar to the crisis faced by the industry at the national level, the 350 engineering industries and foundries in the state are facing serious situation due to the non-availability of raw materials, pig iron and coke. 200 of the 300 units located in Coimbatore have had to close and others carry on on a hand-to-mouth basis. The units need a monthly supply of 12,000 tonnes of pig iron from SAIL and 4,000 tonnes of coke routed through SIDCO. The raw materials shortage has occurred during

a boom period with forward contracts signed by the units up to 1982 During the first quarter April to June, the state received 4,000 tonnes of pig iron and 3,000 tonnes of coke with no supplies of pig iron and coke in May and June due to production interruption in Bhilai, and coke not being moved beyond Waltair because of nationalisation rules The government must act on this matter. The raw materials are available in the blackmarket at very high prices.

Pesticides unit and Coal supplies

In August an agreement to set up 4 public sector companies in the 4 southern states to manufacture basic pesticides and formulations was signed between Hindustan Insecticides Ltd. and the Agro Industries Corporation of Tamil Nadu, Kerala and AP to meet the growing demand for pesticides in the region and the country. The first unit is being set up at the Southern Pesticides Corporation at Kovvur in AP at a cost of Rs. 5 crores and will go on stream within 28 months. The next company will be in Tamil Nadu to be followed by Kerala and Karnataka. This development will correct the imbalance of the pesticides industry being concentrated in the northern and western regions which is not in keeping with the consumption pattern in the south. Coal supplies to the state were seriously affected in August first by the Singareni strike, which held up the movement of 3,000 wagons of coal and seriously affected the paper, cement, textiles and other industries and threatened the stock position of Ennore and Basin Bridge power plants. In the second half of the month there was labour unrest in the Haldia port, leading to stopping coal wagons and affecting cement and thermal units in the state and in south.

Handloom

The continuously rising yarn prices referred to in Vol. IX; p. 371 following the textile strike caught up with the public. After calling the attention of government to the price spurt of over Rs. 50 per bundle, at an emergency meeting of weavers in Coimbatore on August 11, 200 producers in Coimbatore suspended business on August 20. The voluntary price control of cotton yarn suggested by the previous Industry minister was not being observed and premiums were being demanded over the ceiling prices. There is need to roll back yarn prices to the 1978 level and ensure equitable distribution through the issue of identity cards. Another problem faced by the handloom industry in the state is the inadequate subsidy of Re. 1 per metre for counts up to 40 and 50 paise per metre for counts upto 50 for handloom Janata saris. The state government has asked the Union to increase each by 50 paise. This has been turned down by the Handlooms Commissioner on the ground that the Janata sari is not a commercial production but is for the poor. This however applies equally to the handloom weavers who belong to the weaker section of society. The result is that the Janata cloth production in the state which fell far short of the 20 million metres target in 1978-79 will be even more short in the current year. Another programme—that of bringing more of the handloom weavers into the cooperative sector—is running into difficulties because of the pressure of vested interests. Out of a total of 3.5 million weavers, only 1 million are in the cooperatives. Plans to organise a national handloom exposition in Kumbakonam in March 1980 are being formulated and finalised. The Soviet Union is ordering a large consignment of handloom fabrics which should benefit the state weavers.

Leather

In the first quarter of the year, April-June, leather exports increased to Rs. 110.47 crores (against Rs. 75.63 crores in the first quarter of 1978-79), an increase of 46 per cent. Finished leather export rose by 78 per cent to Rs. 70.43 crores, semi-finished tanned varieties grew by 35 per cent from Rs. 17.06 crores to Rs. 22.96 crores, while wet blue slipped by 28 per cent from Rs. 9.26 crores to Rs. 6.62 crores. More serious is the slippage in industrial leather by 13 per cent from Rs. 45.26 lakhs to Rs. 39.36 lakhs, a point to which the industry needs to pay attention. While leather footwear rose marginally by 8 per cent, footwear components rose by 15 per cent. Prices during this second quarter are weakening and so STC is undertaking a drive to attain its export target of Rs. 142 crores of leatherware, which is 40 per cent of the All India target of Rs. 360 crores for this year. It is negotiating large tie-ups with US and Hongkong traders and has launched promotion of high value garments in collaboration with foreign designers. A leather garment manufacturing unit has been established in Madras and initial orders secured from western markets. STC is increasing its exports of finished leather and finished leather products for the year from Rs. 32 crores Rs. 42 crores, an increase of over 30 per cent.

Private sector reports

Sakthi sugars reports that during the current (1978-79) season it has crushed 8 62 lakh tonnes of cane against 3.66 lakh tonnes in the previous season, with a recovery of 8.3 per cent which was lower than last season's 9.24 per cent due to heavy rains which brought down the quality of the crop. For the next season, it reports registering cane of about 17,500 acres which will supply 7.5 lakh tonnes. Kunal Engineering reports for 1978-79 a turnover of Rs. 250 lakhs and gross profits of Rs. 2 lakhs. Its spindle capacity was doubled and commercial production started in March 1979. With West German collaboration, it will manufacture high speed rings for woollen and worsted yarn, chord spinning and nylon.

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IV Education, Science and Health

Unrest in educational institutions

In the 17 cases of unrest reported in August in educational institutions, four types of causes for the unrest are involved: a) In four cases—Kanpur University, Gorakpur University, Gauhati University and Kerala University widespread disturbances by students are due to attempts to prevent cheating in examinations; b) in 3 cases violence followed some student grievances as in Calicut University, Kasividyapith; c) the largest number, 8 cases, were due to teachers' agitation which disrupted the work of the institution and involved agitation and sometimes violence. These were Presidency College,

Madras, SIET, Madras, all Madras colleges, Jawaharlal Nehru University, New Delhi, Maharishi Dayanand University, Goa University, Punjab University and Chandigarh colleges ; and d) finally, there were 2 cases in Himachal Pradesh University and IIT, Punjab Agricultural Universities and Ludhiana Colleges, where some incidents combined with political demands led to serious unrest, violence and injury. August was a bad educational month.

Educational reforms

NCERT and NPC have jointly prepared a productivity syllabus for use in schools from the primary level. This syllabus aims at making the student understand the role of productivity in the efficient management of resources and develop a desire for better quality of life. In order to meet the pressure for higher education from the increasing numbers coming up from SSLC (a consequence of the spread of education), avoid opening of more teaching shops and at the same time not being able to start more colleges because of the shortages of resources, Kerala university has introduced the shift system in colleges under which 16,000 more students will be admitted in its pre-degree classes. The question may be posed whether the pre-degree classes should not be separated from the university and sent back to the school sector as another way of solving the problem of numbers. The Punjab government in response to continuing student agitations, has decided a) to examine rationalisation of the entire fee structure in colleges (which means lowering them), b) to reschedule bus timings to help students get to colleges, and c) regulate, if necessary by legislation, the prices of textbooks and their availability. The Tamil Nadu government has decided to open two new law colleges one in Coimbatore and the other in Tiruchirapalli as part of the plan for the two new universities in those cities. The colleges to be started this year will admit 120 students a year. The government has also ordered the creation of 3,000 posts of part-time teachers to teach subjects under vocational education in 1979-80. Besides the 700 odd schools offering over 1,000 courses, further schools may come under the scheme. Two vocational teachers are being provided per course. The government has also sanctioned Rs. 5,000 each to 401 higher secondary schools and Rs. 2.500 each to 308 local body and aided higher secondary schools for the purchase of equipment for vocational courses. It has also accorded sanction to all its higher secondary schools to spend Rs. 6,000 per school on library books and to aided schools Rs. 2,400 for the same purpose. The government announced that candidates with eighth standard qualification and 16 years of age and those who have studied in other states but are residing in Tamil Nadu to appear as private candidates for the SSLC examination starting in October 1979.

Technical education

Madras university is introducing a non-formal one year post-graduate diploma course in its engineering colleges, who will decide on the nature of the course in response to local industrial needs, design the syllabus frame, evaluation and other rules and award the diploma themselves. This carries a step forward the para-professional courses instituted by the university. Engineering and medical students are also to be allowed to continue their studies even if they fail in one subject till the final year when they must pass in all subjects in the final semester. It rejected the proposals for a condensed 3 year medical course for M.Sc. candidates in agreement with

IMC. With the +2 introduced, the engineering course (BE) is to be reduced from 5 years to 4. A similar change in the MBBS course is under study by IMC.

Science

On August 10, the experimental Satellite Launch Vehicle (SLV-3) was launched from Sriharikota. The fourth stage motor and the 40 kg. pay load splashed down in the Bay of Bengal 500 km. off Sriharikota on account of the abnormality of the second stage. The lift of the booster and the separation were normal. The high point of SLV-3 was the indigenously developed solid propellant and to develop our own launch vehicle, there will have to be several attempts like this—as was experienced by the US and USSR—before success is achieved. The National Remote Sensing Agency reports that its proposed Rs. 2.5 crore earth station in Shadnagar, AP, will become operational in October. Station trials show that it had started tracking and receiving earth resources data from Landsat I and Landsat III as well as meteorological data from TIROS—N and NOAA-6 satellites.

Health

At the end of August, a U.N -sponsored conference of parliamentarians from 60 countries met in Sri Lanka to consider the problem of population and its effect on development in the Third World countries In India a massive training programme involving 1.6 million people to generate greater awareness of health and nutrition and family planning in which the community is the key factor is being launched. 40,000 orientation camps, including 8,000 women camps are planned for this purpose. In Tamil Nadu, a Rs. 60 crores nutrition pilot project covering the districts of Madurai, Ramanathapuram, Tirunelveli, Pudukottai, Chinglepu and North Arcot is to be launched with World Bank aid. It will be aimed at children under 3 years of age and will start at Kottampatti in January 1980. The state government has also launched in August a massive drive to detect symptoms of leprosy in school children. A first survey of 30,000 school children showed that 700 had positive symptoms which were being treated. In August, the state government also launched operation thermo fogging to kill mosquitoes and combat malaria in Madras city, and coastal areas of Ramanthapuram.

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V Employment

One of the first major schemes of the newly formed Ministry of Rural Reconstruction is the National scheme for training rural youth for self employment (TRYSEM) which was launched on August 15. The scheme will train 2,00,000 rural youth every year in agriculture and allied activities and will be funded by the state and central governments out of the IRD allocations. The self employment courses are horticulture, integrated pest control, post harvest technology, fishery, forestry, agricultural machinery, gobar gas plants, animal husbandry, soil care, water shed management, sericulture, agriculture and small industries. In Tamil Nadu, the government sanctioned the scheme for 3 month courses to be run from September at 19 ITIs. Each trainee will receive a stipend of Rs. 75 and tool kit worth Rs. 100/-on completion of training to start his self-employed career. The Food for Work Programme, under which 1.6 million tonnes of foodgrains were disbursed in 1978-79, faces problems from an embargo on Rs. 100 crores placed by the finance ministry when over Rs. 100 crores have already been disbursed and plans were ready to make available 2 million tonnes. On top the new minister of Rural Reconstruction has some questions on the Programme because he sees it affecting the interests of farmers in bringing down foodgrain prices and pushing up wages of farm labour. In Tamil Nadu, the programme, which started late in April 1979 because of the demand for rice instead of wheat as the disbursable foodgrain and which was finally granted in March 1979 (see vol. IX, p. 215) has in the first two months generated 15.51 lakh mandays of employment and Rs. 96 lakhs of community assets—roads, buildings desilting irrigation tanks, tree planting and soil conservation. Out of the 47,000 tonnes of rice allotted by the Union government, 42,103 tonnes have been disbursed with these results. The state has also introduced an *Employment Guarantee Scheme* under which all able bodied above 18 will be given jobs within a month of registering with the Gramsevaks or Panchayat Union Offices. Payment will be made on the basis of work output and 50 per cent will be in foodgrains. Kerala introduced in August a provident fund scheme for agricultural workers, starting with 2.5 lakh agricultural workers in Palghat district, to be extended shortly to other areas. This is the first social security scheme for agricultural workers in the country and is an important landmark. The Union labour directorate reports that a recent survey shows that in 1979 there were 20 million children in the labour force against 10.7 million in 1971. Asia has the largest child labour among the world's regions and India was in the same unenviable position, with most child labour in the unorganised sector. Hence India has not been able to ratify the ILO convention on Child labour. The February-March and April 1979 issues of CSIR's *Technical Manpower* reports in detail on the 6,678 scientists in the pool. Most of them are working in towns with Delhi leading and about 42 per cent in universities and deemed universities, 15 per cent in medical colleges and 11.3 per cent in hospitals.

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VI Other Items

Director's Section

With the addition of the new faculty members there has been a quantum jump in the activities in the Institute. On September 3 there was an informal meeting when Dr C. T. Kurien gave an account of the impressions he gathered about the Soviet economy and society during his visit to the USSR in August as a member of the Indo-Soviet Joint Commission on Social Science Research. All members of the Institute attended the meeting and many took part in the discussions that followed. A similar meeting was held on September 4 when Mr. S. Guhan presented a quick survey of China today on the basis of his visit to the People's Republic of China in August as a member of the Independent Commission on International Development Issues. (Mr. Guhan's impressions of the visit to China appear elsewhere in the Bulletin.)

A session of the Research Scholars' Seminar was held on September 8 with Mr. V. K. Ramachandran, Ph. D. scholar of the Institute presenting a critical review of the sources of data pertaining to land ownership and holdings for Tamil Nadu. Another research seminar was held on September 21 to discuss Dr. John Harriss's research proposal on the dynamics of the "informal" sector in Tamil Nadu.

In addition to these, two fairly long sessions, one on September 22 and the other on September 24, were held to outline in some detail a work programme for the Institute. The discussions took off from the note 'Research Orientation of the Institute' which the Director had prepared in 1978 (reported in the **Bulletin** August 1978) and which was approved by the Governing Council. It was decided that apart from the work that individual members are currently engaged in, the future research activities of the Institute must include the following :

A. Work on Research Infrastructure following up the production of the Manual of Sources of Data on the Tamil Nadu Economy that has been completed and the compilation of Area Study Bibliography now in progress.

B. A series of studies on districts, blocks and villages to bridge the gap between isolated micro studies and aggregative macro studies.

C. Research programmes centering on

   i. The food economy of Tamil Nadu

   ii. The process of industrialisation

   iii. Demography, health and education.

It was suggested also that a coordinated effort should be made to contact institutions and individuals in and around the city currently engaged in the study of Tamil Nadu and on development problems.

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Jammu and Kashmir Commission

The Jammu and Kashmir Commission of enquiry into regional imbalances paid one visit to Srinagar, Pahelgam and Byculla and two visits to Jammu and to Samba, Kotuah, Hirarpur and Jalankot during which it received representations from the people at various levels on their grievances and views on imbalances.

AIR and IAEA

AIR organised in August two forums to discuss Education in Free India and prospects and problems of free and compulsory primary education in India. There

was consensus among the participants that in the three decades since Independence education had not been the quantitative and qualitative needs of the country and that there was need for a complete restructuration of the formal system to which the informal and non-formal learning systems need to be developed as corrective. The Executive Committee of the Indian Adult Education Association met in early August and reviewed the progress of NAEP in light of the governmental changes. It planned for the Annual Conference of the Association to be held in early October in Amritsar and decided that the theme of the conference should be the relation of NAEP to national development.

UGC review and IIT

The UGC ReviewCommittee met in August and reviewed its draft report on how the IV and V Plan grants had been used by the universities and colleges and what impact they had on standards and life of the community. The report is to be finalised by the end of September, though with the dissolution of the Lok Sabha, its presentation to Parliament will have to await till early 1980. A meeting of the IIT Staff Association, Guindy, Madras in August reviewed the Science and Technology provisions of the VI plan and suggested a closer link of S & T to the rural and industrial objectives of the plan.

MIDS

A meeting of the Executive Council of the Madras Institute of Development Studies followed by a meeting of the Governing Council was held in mid-August. The report of the Director on the programme of the Institute was reviewed with satisfaction. Staff appointments made by the Executive Council were ratified and the revised budget for 1979-80 and the budget for 1980-81 approved.

UNESCO

A meeting of the UNESCO International Jury to choose the two outstanding adult education events for the two prizes in 1979 was held at the end of August. It reviewed some 60 cases presented by member states and decided on the two prize winners and others who received honourable mention, which will be announced on the World Literacy Day, September 8.

Rajya Sabha

Rajya Sabha was called into session on August 20, but on the resignation of the government, was adjourned *sine die* and later prorogued.

September seminar

The paper for the September Seminar, Rural industries: Problems and prospects by Dr. C.Arputharaj, Professor and Director, Agro-Economic Research Centre, Madras University, under the chairmanship of Mr. E. S. Srinivasan together with a summary of the discussion on the paper appears as the first article.

Second article

A Note on China by Mr, S. Guhan appears as the second article.

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Rural Industries: Problems and Prospects

By

C. ARPUTHARAJ*
Madras

Introduction

The problem of employment to the under-employed, unemployed and to the new entrants to the labour force has to be tackled by finding new avenues of gainful employment in fields other than agriculture. The expansion of rural industries is most desirable in view of their vast employment potential, relatively low per unit investment, short gestation period, simple techniques of production, wide dispersal possibilities, easy availability of the required machinery and equipment, rising consumer demands, growing needs of sectors like agriculture, transport and irrigation and mobilisation of entrepreneurial motivation. Rural industries offer a method of ensuring a more equitable distribution of the national income and they facilitate an effective mobilisation of resources or capital and skill which might otherwise remain unutilised.

The primary objectof developing rural industries is to extend work opportunities, raise income and standard of living and to bring about a more balanced and integrated rural economy. As the rural economy develops, technical changes will take place in different fields and correspondingly, the pattern of rural industrialisation will also change from simple crafts meeting elementary needs to small industries based on steadily improving techniques and designed to satisfy the need of a more advanced character.

The following factors are essential for proper and quick growth of rural industries :

(i) Identification and formulation of viable proposals,

(ii) Provision of basic infrastructure facilities,

(iii) Support of inputs including credit,

(iv) Support in marketing of products, and

(v) Traning of entrepreneurs as well as provision of guidance in running the ventures.

Definition

Cottage or rural industries were first defined by the Industrial Commisson "as

*The author expresses his thanks to Messrs. E. C. Rajayan, R. Rajagopalan and R. Swaminathan, staff of the Agro-Economic Research Centre, for their assistance in preparation of this paper.

industries carried on in the houses of the workers where the scale of operation is small and there is, but little organisation, so that they are, as a rule capable of supplying only local needs".[1] It appears that the Industrial Commission described the condition as they then existed, rather than defining the term itself. The Uttar Pradesh Industrial Organisation Committee while discussing the scope of cottage industries, which even used power in their working and further pointed out that some of those industries were very well-organised. According to this Committee, Cottage Industries "are those in which work is done, generally speaking, in the home of the artisans and occasionally in small factories run by the Industrialists of the entrepreneur type; power driven machinery is rarely used".[2] This Committee has extended the scope as much as they included those small factories also in which cottage workers were employed as well as those establishments in which power was used.

However, a proper definition of rural or cottage industries should be based on the realities of our rural set up. With this in view, the term rural industry can refer to such industries in the rural areas as can be carried on in a place where the workman himself lives, by his own or the members of his family labour or his immediate neighbours. And it is one which neither needs specially skilled personnel nor sophisticated machinery.

Further, rural industrialisation is to be based on local resources and local needs. The term 'local' does not necessarily imply one single village ; it might include a village, a group of villages or a block, depending upon the nature of the industry and the technology used. The raw materials are mainy to be obtained from the locality, but in part they can also come from the urban centres, such as iron and steel for making agricultural implements. Similarly, the primary objective is to meet the local demands, but supply to urban areas is not to be ruled out. There should be no pre-conceived limitations or inhibitions of a doctrinaire or sentimental type in regard to matters relating to the use of power and choice of levels of technology. The only consideration is to maintain a balance between employment and efficiency.

Problems

There are numerous problems encountered by the rural industries. They are not getting the required quantity of raw material at a standard price throughout the year and they are not in a position to hoard stock of raw materials for long when it is available in plenty for want of adequate credit facilities. Similarly, they cannot withhold the finished products because it blocks up scarce capital. This not only reduces profitability but also leads to higher requirement of working capital. The quality of the products also must be acceptable to the consumers. It is so because the rural market is small and the consumers of the towns and cities are selective. The rural industries mainly have to depend on the urban consumers. Presently, more than 60 per cent of manufactured products cater to the urban consumers. Thus, only 40 per cent of the products are available to the nearly 80 per cent of the rural population. It is mainly due to low level of rural income and poor purchasing power. Because of low level of rural incomes, more than three-fourths of the household consumption is devoted to food. With increasing rural incomes the demand for manufactured and processed consumer goods will tend to rise. It is

[1] Rana Pratap Chand, *Rural Industrialisation in Uttar Pradesh*, Khadi Gramodyog, 6th March, 1970-Page 486.
[2] *Ibid*, page 487.

this 'market' which these rural industries should attempt to serve.

The traditional type of village industries though labour intensive and involving much less capital investment, are not able to provide remunerative income to workers engaged in them. In spite of the best efforts of the government and subsidies and grants of crores of rupees through various agencies, they have not shown the capacity to withstand the onslaught of a market oriented economy. In this cruel competitive world, economic viability is the first condition for any industry to survive and grow.

Rural industrialisation is not an easy task, it is full of difficulties and hazards and at times very frustrating. Lack of entrepreneurship, organisation, managerial and technical skill and gaps in infrastructure are only a few of the stumbling blocks on this path.

It should be borne in mind that rural industrialisation is a formidable task requiring a very sensibly planned scientific methodology, financial resource, close coordination among different sectors of rural economy and above all a will to succeed on the part of those engaged in this great task of national and economic regeneration.

As per Gandhiji's view, the village should be the centre of the economic scene instead of being on the periphery. The development of appropriate village industries was integral to his concept of revitalisation of the rural economy.

Prospects

In order to increase the purchasing power of the rural households adequate employment opportunities are to be created. Only rural industries can create employment opportunities on a large scale both for the skilled and unskilled rural labour force. Further the rural industries alone can provide fuller employment to the underemployed and seasonally unemployed workers.

Based on the above objectives in mind, in this paper an attempt has been made to develop a model for an areal region. The model developed is given below :

(i) The Model

$$E_u = E_p$$

$$N = n_1 + n_2 + n_3 + n_4 + n_5$$

$$E_A = \alpha_1 n_1 + \alpha_2 n_2$$

$$E_C = \alpha_3 N_3$$

$$E_L = \alpha_4 N_4$$

$$E_p = 335\,N - (E_A + E_C + E_L)$$

Where :

- N Total labour force
- n_1 Cultivators
- n_2 Agricultural Labourers
- n_3 Artisans
- n_4 Casual labourers (non-agricultural)
- n_5 Unemployed
- E_A Current employment days in agriculture
- E_C Current employment days for arts and crafts
- E_L Current employment days for casual labour (non-agricultural)
- E_p Proposed employment days

E_u Current unemployment days

α s are the number of days employed in the respective categories.

Assumptions made :

(i) Three hundred and thirty five days of employment in a year is taken as full employment.

(ii) Two under-employment days are taken as one unemployed day.

(iii) Thirty days in a year are taken as non-available days for work.

On the basis of the above model a quick survey was conducted in the Porur village of Saidapet taluk, Chingleput district, taking into consideration the availability of local resources and manpower. One can get himself employed by the establishment of certain rural industries to solve the rural unemployment to an extent.

(ii) Working Model

Population	—	6,000
Males	—	2,800
Females	—	3,200
No. of House holds	—	1,300
Average family size	—	4·6

Dependents

(Includes children below 14 years, students studying, old people above 55 who are not working, disabled people and totally unemployed :) ... 3175 (52·92%)

Households

(a)	Cultivator households	550	42·30 %
(b)	Agricultural labourers	400	30·77 %
(c)	Artisans	50	3·85 %
(d)	Salaried employment	100	7·69 %
(e)	Petty shop owners and business people who are fully engaged.	75	5·77%
(f)	Casual labourers	125	9·62 %
		1300	100

Average size of holding per household	1.49 acres	
Gross cultivated area	817 acres	
Wet lands	437 acres	53·49%
Garden lands	366 acres	44·80%
Dry lands	14 acres	1·71%

Soil Type :

Clay Soil	264 acres	43·93%
Sandy soil	337 acres	56·07%
Total	601 acres	

Present Cropping Pattern

Wet land :	Paddy, ragi, groundnut, vegetables, plantain and coconut trees.
Garden land :	Paddy, ragi, groundnut, and vegetables
Dry land :	Groundnut, horsegram and cholam.

Present employment level per year

	Cultivators	Agrl. labourers
(a) Agricultural Operations	200	180
(b) No. of days not available for work	30	30
(c) Unemployed	30	50
(d) Underemployed	105	105
(e) Working population	1200	810

Mandays unemployed
1200×83 = (99,600) 810× 103
= 83,430

II. Artisans

No. of full working days	180
No. of days not available for work	30
No. of unemployed days	30
No. of underemployed days for the working population	125

Mandays unemployed 105 × 93
= 9,765

III. Casual labourers

No. of full working days	180
No. of days not available for work	30
No. of unemployed days	60
No. of underemployed days	95
Working population	310

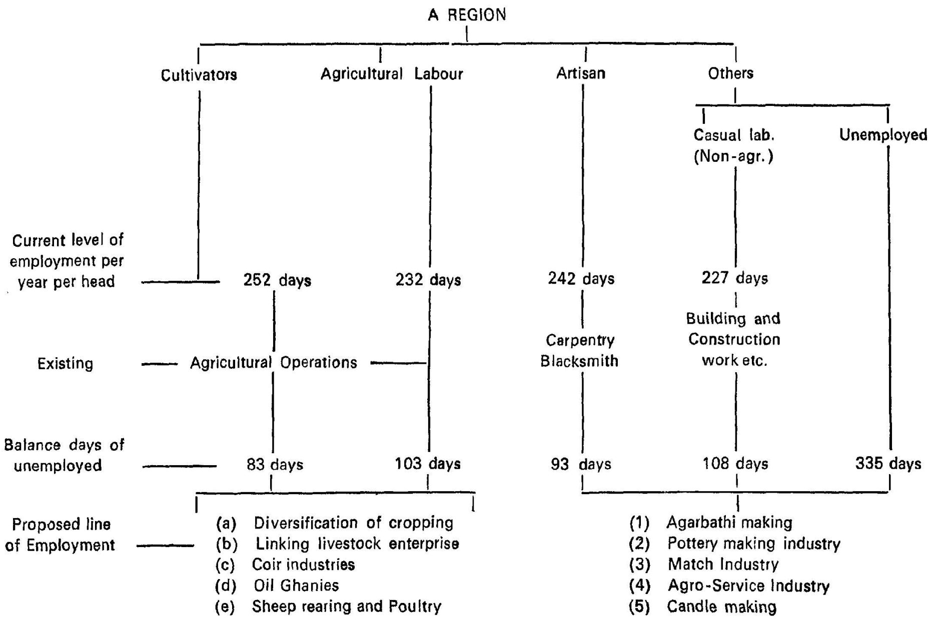
Mandays unemployed 310×108
= 33,480

IV. Unemployed people 150

Mandays unemployed
150×335 = 50,250

The total number of unemployed man days in various categories are 276525 days per year for the village studied, Profitable employment opportunities can be created for these unemployment days if Agarbathi, Pottery, Match, Candle making industries etc , are established in the village As this village is closer to the city, marketing would not be a problem for any manufactured goods. These industries require lesser investment but are more labour intensive. This model can be used for other homogeneous areas/regions. The same model has also beed diagrammatically presented.

A MODEL FOR AREA PLANNING



September Seminar
Summary of Discussion

Dr C Arputharaj presented the paper "Rural industries : Problems and prospects" at the seminar on Sept 27, 1979 at the Institute. Opening the session, the Chairman remarked that although for many years there had been awareness of the need for reviving rural industries and rehabilitating rural artisans, and although various institutions like the Khadi and Village Industries Board existed for promoting rural industries, the matter had not received serious attention. However, there had been revival of interest in developing rural industries in recent times. Thus the subject matter was an old as well as new one. In-depth analyses on the subject being so few, the Chairman appreciated the introduction of analytical tools by the author in his paper.

Presenting the paper, the author observed that the answer to the problem of unemployment lay in the expansion of rural industries and increasing the purchasing power of the people. While rural industries were primarily to utilise local resources and meet local needs, the possibility of importing some raw materials from and exporting finished products to other areas was not to be ruled out. The author simultaneously pointed out the hurdles to rural industrial growth such as non-availability of raw materials, selectiveness of consumers and stiff competetion in the market. For purposes of estimating the level of employment and unemployment the author developed a simple accounting model using data collected from a survey of Porur village near Madras city. Based on the unemployment figures yielded by the model, the author recommended the establishment of several labour intensive industries in the village.

The employment model developd by the author generated much debate in the discussion that followed the presentation of the paper. It was felt that the primary need was to define more clearly the objectives of the model. Besides inclusion of other objectives such as increasing rural incomes, equitable distribution of income and eradication of poverty along with the employment objective was desirable as this would throw light on many issues and improve the quality of the model. Further, it was observed that the key concept in the model, viz., employment required a clear definition. (This also meant defining unemployment and underemployment clearly.) It was also necessary to state whether the employment objective was a short run or long run objective for small scale industries (which the author recommends) maximise employment in the short period, but, having

weak forward and backward linkages, might not do so over a length of time.

The suitability of the occupations and industries suggested to solve unemployment and also the basis for suggesting these industries were questioned. For nstance, pottery and agarbathi making as subsidiary occupations were inappropriate for artisans like blacksmiths and carpenters and also raised certain problems. The pottery industry by tradition being monopolised by a certain community, it was possible that sociological factors may not permit new entrants to the industry. Moreover, the cost of social transformation had to be considered. Further, there would be the problem of loss of skill and the danger of artisans being permanently absorbed in their new occupation. While at the micro level the loss of skill may not appear to be serious, it assumes greater dimension at the national level.

There was much debate over the suggestion to establish match-producing units in the village to provide employment opportunities. The fact that in the South this industry was dominated by a large scale unit and by cottage units in Sivakasi immediately raised several questions : (i) Would small units be technologically as efficient as or more efficient than large units ? (ii) Were the resources and expertise for starting new units available locally ? (iii) Would policy towards large and small units have to be reframed at the national level ? and (iv) Was it rational to promote rural industries at the cost of curbing large scale production (especially with the danger of causing massive unemployment in the large units) ?

Responding to some of the issues raised above, the author stated that the employment model developed by him was preliminary in nature and was primarily based on data collected from officials of the village surveyed. He clarified that his conclusions and recommendations were applicable only to the sample village. He also expressed that his recommendation to establish certain industries in the village was in line with the views expressed by the village officials.

Further it was felt that the problem of unemployment in the rural areas and the causes for rural industrial backwardness could be analysed by studying the system of controls or the power structure in the village, i.e, the pattern of ownership of the means of production. It was quite possible that vested interests (those controlling some of the major inputs) were obstructing rural development.

Some aspects requiring further attention were stated to be : (i) the nature of and reasons for unemployment, (ii) the influence of economic and social factors on rural industrial development, (iii) the reasons for the poor progress of rural industrial development despite the numerous forms of incentives presently being offered, and (iv) rural mobility. The need for more rigorous analysis using the data generated by the model was stressed by all participants.

The five major suggestions offered to develop the paper were : (i) to specify and modify the objectives of the model, (ii) to study the power structure in the rural economy, (iii) to incorporate social cost contraints in the model, (iv) to take into account market demand and technological factors and (v) to develop the analysis historically.

The seminar was chaired by Dr E. S. Srinivasan.

Notes on China, 1979*

The world is sick of chaos and it is sick of dictatorship.

—George Orwell.

No individual freedom can be guaranteed without order and discipline of some kind. In essence the unity of freedom and discipline means also the unity of rights and duties. Marx put it well that there is no right without duty, nor duty without right. Clearly, whoever wishes to enjoy personal freedom must respect the personal freedom of others, whoever wishes to enjoy the right to freedom of speech must undertake to refrain from mud-slinging and rumour-mongering. and whoever wishes to enjoy the right to work and to receive wages from society must observe labour discipline, obey management direction and act according to work rules.

—Premier Hua Guofeng

I visited Peking for two weeks at the end of August 1979 as a member of a team from the Independent Commission on International Development Issues (the Brandt Commission). We were invitees of the Chinese Peoples Institute for Foreign Affairs. The visit, although short, gave an opportunity for discussions on a wide range of international issues and internal development experiences with the Chinese authorities and field visits to a commune, residential neighbourhoods and factories. And, it provided a useful background to which information gathered on current developments in China before, during and after the visit could be related. In writing up these notes, I am confident that nothing that they contain will embarass either our Chinese hosts or the Brandt Commission. Opinions and value judgements are, of course my own and do not derive from either the Commission or the Chinese.

The first thing that strikes the Indian visitor to Peking and its environs, particularly in the summer, is the visual similarity to India and this impression lasts throughout. Close and open your eyes, the streets, buildings and traffic in Peking remind one of parts of Delhi and Bombay and the countryside could be Punjab or Haryana. The correspondence is more than visual. Both countries are poor and populous and contemporaneous, being 30 years old after their new birth : China after liberation and India after freedom.

China has, however, gone through a very chequered history during the three

* Impressions gathered by Mr. S. Guhan during his visit to the People's Republic of China in August 1979.

decades of her post-liberation life. 1949-52 was a period of military and administrative consolidation, revival of production, and control of inflation. 1953-57 was the First Plan implemented, as far as external help went, with Soviet assistance. 1958-61 was a troubled period - the Great Leap Forward, Soviet withdrawal, natural disasters and criticism of the Great Leap. 1962-66 was once again a period of readjustment and revival. Then followed the ten years 1966-76 - the Great Proletarian Cultural Revolution, Lin Piao and his disappearance (September 1971) an interregnum of military ascendancy followed by the activities of the gang of four (Wang Hung-wen, Chang Chun-chiao, Yao Wen-yuan and Mao's wife, Chiang Ching) with the death of Premier Chou *En-lai (January 1976) and Chairman Mao* Tsetung (September 1976) coming at the close of this period. The gang of four were 'smashed' in October 1976 following which a mass campaign on exposing them was launched. This was declared to be over by the end of 1978. China in 1979 has formally turned its entire attention and energy to its Programme of Four Modernisations originally proposed by Premier Chou En-lai in 1975 but fully articulated and inaugurated in 1978-79.

This history, especially that of the ten years following 1966, has had many twists and turns in terms of both ideology and power politics — There are many accounts of it. Interpretations vary and value judgements differ on the course of events.[1] What is very clear however to any one who talks to the Chinese - *at offical or non-official* levels - is that they have an intense feeling of having come out of a very troubled period in their country's life and payche. They share a deeply felt reaction to what they went through, have learnt many lessons, and are determined that "it shall not happen again" The Four Modernisations is, therefore, not just a programme of economic revival and growth. It is a new mood, in-fact a whole new elan.

It is important to understand the perceptions of Chinese officials, academics, commune members and workers to the events and characteristics of what they term as the "period of Lin Piao and the gang of four". In short summary, they *see these years as a time of intense* factionalism, anarchy, arbitrariness and an autarkic approach to the external world. Illustrations given are plentiful. Chairman Mao said ' Unite, and don't split, be open, and above board, and don't intrigue and conspire". But, "they exploited every political movement launched by Chairman Mao to do something different, vainly hoping to divert the course of each movement and plunge the party, the *army and* the Country into chaos"[2]. Anarchy and arbitrariness : Universities and higher educational institutions were dismembered and professors sent to the countryside, their homes in Peking were occupied; laboratories were dynamited; blue prints were burned; the Statistical Bureau, the Commission on prices and several planning agencies were wound up; and so on. Anti-production and anti-efficiency slogans were promoted : "Socialist weeds are better than capitalist rice", and "Better a socialist train behind schedule than a capitalist train on time" Autarky : Exports were described as "national betrayal" imports as "servility to things foreign" *and the introduction* of foreign technology as "the doctrine of trailing behind at a snail's pace".

The underlying philosophy of the Four Modernisations programme is not only a

reaction to these trends and tendencies but a strongly positive approach with unity (vis-a-vis splittism), stability (vis-a-vis anarchy) and liveliness (vis-a-vis ostrichism) as the main slogan. The accent is on consultation, the rule of law, internationalism and on autonomy, efficiency and accountability in enterprises and communes, within a framework of freedom and direction. Democratic centralism is the Chinese phrase.

These emphases are now being translated into specific policies in the three development sectors of modernisation viz., Agriculture, Industry and Technology as well as in several other sectors of national life and activity.

Agriculture

Climatically, 1978 was not a good year in China, yet grain output reached 7·8 per cent over 1977. At 304·75 million tonnes, it was the highest in per capita terms since liberation. It is recognised by the Chinese that two observations do not make a trend and they freely admit that the growth of agricultural output since liberation has not been impressive. That is so in the assessment of independent analysts was have written on the subject[3] but we should note that the absolute level of per capita grain availability in 1978 in China at 314 kg. was more than 50 per cent higher than in India in the same year. China has only about 7 per cent of the arable land on the globe but has to feed nearly 25 per cent of the world's people. The extent of irrigated land—nearly 50 per cent—is relatively high and there are extensive grass lands, inland and coastal fisheries and forestable areas which can support a diversified agricultural economy. Given the basic draw back of inadequate cultivable land, and these opportunities being open, agricultural policy in China naturally places emphasis on increased productivity and diversification.

The instruments for carrying out such a policy of agricultural modernisation are clearly identified. Research, irrigation, rural electrification, increased use of chemical fertilisers, pesticides and improved seeds and mechanisation are the main programmes for achieving productivity increases. It is admitted that agricultural research is not as well organised as it should be partly because of the disruption in the 1966–76 decade. Mechanisation gets much emphasis. The official figures are that in 1978, China acquired an additional 90 000 large and medium sized tractors, 2,80,000 walking tractors and more than 20·17 million hp of other farm machines. It is, of course clear to the Chinese that mechanisation will displace employment but they strongly feel that machines are necessary not only to increase productivity but also to reduce the drudgery of farm labour. They are also confident that more intensive cultivation and a diversified agriculture can absorb labour for better purpose They point out, for instance, that as against 1500 million Mu (6 Mu = 1 acre) of arable land, China has nearly three times this extent in grass land (4300 million Mu) offering rich potential for animal husbandry. Fish consumption is still very low and can be significantly increased—Forests cover only about 13 per cent of the land. The target is to increase it to 30 per cent in the next 20 years. Much employment can clearly be created if all this potential is exploited.

Modernisation of agriculture will need not only programmes but adequate

investment and incentives to farm producers. The approach in this regard and the measures taken are as follows :

(a) In the sphere of production relations, the commune system has been stabilised—Communes were formally inaugurated in 1958 with the conversion of 7,40,000 production cooperatives into 26,000 communes covering almost the entire agricultural population. In the early sixties, the size of individual communes was reduced and their total number went up to 70,000. This move was reversed in the late sixties and the total number has now settled down at 52,000. On an average, a commune covers 280,000 Mu and includes 3,000 families organised in the form of production brigades (250 families) and production teams (35 families). The entire discussion on incentives has to be understood within this basic framework.

(b) Increased investment in agriculture in the state budget going up from 10.7 per cent in 1978 to 14 per cent in 1979.

(c) Increased production of inputs for agriculture such as chemical fertilisers (9·57 million nutrient tons in 1979), pesticides and tractors (95,000 in 1979).

(d) This year the state purchase prices for grain have been increased by 20 per cent for purchases up to the quota. Prices for grain purchased in excess of quotas will be 150 percent of the new price. Increases have also been made in the purchase prices for cotton, oil seeds, pigs, and other farm products with the average increase for 18 main farm products being 24.8 per cent. The farm price increases are expected to transfer an additiona 6,500 million yuan (1 yuan = Rs. 5·33) to the agricultural sector.

(e) Reduction or remission of agricultural taxes and taxes on enterprises run by communes to a total extent of 500 million yuan.

(f) Reduction in the prices of farm inputs such as fertilisers and agricultural machinery.

(g) Encouragement to side-line activities in private plots. These plots amount to about 5 per cent of the area—They are allowed to be cultivated on a private basis with grain, vegetables, fruits or used for raising livestock, to generate supplementary household incomes. The produce is generally sold in village markets or to neighbouring communes.

(h) The stabilisation of the production team as the accounting level instead of the brigade as was the case earlier. Since the team is a smaller grouping, work-points are arrived at with closer regard to individual output and the extent of "averaging" is reduced. In other words, incentives are allowed sharper differentiation.

Industry

The priorities in the industrial sector are clearly laid down. They are : (a) industries that supply inputs to agriculture or process agricultural products (b) light industries that produce mass consumption goods, eg., textiles, footwear, bicycles, radios, sewing machines, watches and so on (c) industries related to energy (oil, coal, power) and raw materials (mineral-based industries, cement etc) and (d) only finally, heavy industries.

Present (1978) output levels in the major industries will be of interest :[4]

Steel (million tons)	31·78
Coal (million tons)	618
Crude oil (million tons)	104
Electricity (billion kwh)	256
Chemical fertilisers (million nutrient tons)	8.69
Chemical fibres (tons)	2,85,000
Railway freight (million tons)	1007

There is a great deal of emphasis not on output but on quality, conservation of energy and raw materials, reduction of inventories, timely replacement and renewal, and full utilisation of installed capacities. The Finance Minister Mr. Zhang Jingfu in his Budget speech notes that the deficits of enterprises in agriculture, industry, communications and commerce which had been in the red were reduced by 2600 million Yuan in 1977 and by a further 3,250 million Yuan in 1978. Even so, he addresses these problems of efficiency with amazing (and, to us, refreshing) frankness and force, as the following extracts will show :[5]

(A) ' At present, quite a number of enterprises are still turning out low quality, unwanted products whose consumption of raw materials is too high and whose profits are too low, with even losses in some cases".

(B) "At present, we are confronted with a striking problem : huge sums in circulating funds are lying in the sphere of production and circulation, there is serious overstocking of the materials and the turnover of funds is sluggish"

(C) "The losses incurred in the construction process, in production rejects and through deterioriation of materials and supplies easily run into millions and even tens of millions of Yuans. It is a shocking and intolerable state of affairs".

There is a movement towards greater autonomy along with this emphasis on greater accountability. In the words of the Finance Minister,

"In relations between the state and the enterprise, on the one hand, there is the malady of too much control, over-tight management and on the other, there is confusion in the management, go-it-alone decisions, a reckless drawing and spending of money and the dispersion and waste of state funds"

A major decision that aims at promoting efficiency and autonomy was taken in November 1978. This is the enterprise fund system under which any enterprise that has fulfilled its quotas under the state plan in all respects will be entitled to use a certain proportion of its profits for collective welfare and for incentive awards to its workers and staff. This scheme which was initiated on an experimental basis is being further improved and extended. Enterprise funds now amount to 1700 million Yuan a year.

Workers have also benefited from wage increases, In the last quarter of 1977, 40 per cent of workers and staff were moved to higher wage-brackets and the wages of another 20 percent were raised to varying degrees. These increases have brought average annual wages in state-owned industrial establishments from 602 Yuan in 1977 to 644 Yuan in 1978, an increase of 7 per cent.[6] Workers' welfare gets a great deal of attention. Day-care centres take care of children of women workers from age 60 days to 7 years. Housing for workers has gone up by 33 per cent in 1978 over the previous year.

Centralised planning for about 300,000 large, medium and small enterprises is a complex process. The Chinese well recognise the difficulties involved and freely admit that they have committed mistakes in production planning and coordination. As a result, imbalances between supply and demand have occured from time to time resulting in surpluses or shortages. In consumer goods, this problem is somewhat mitigated by the fact that targets

are constrained at present by capacity rather than demand. The current shift in emphasis from heavy to light industry is itself presumably a reflection of over-investment in capital goods. The approach to these problems is many-sided: better planning, more information, rapid readjustments and restructuring. Restructuring in Chinese terminology has two aspects: specialisation and conglomeration. Specialisation is the management of industries with reference to forward and backward linkages: e. g. tobacco cultivation, tobacco processing, cigarette manufacture and marketting of cigarettes; or another example, mulberry cultivation, silk reeling and weaving, further processing and sale.) Conglomeratron is grouping of inter-related industries such as iron ore, coking coal, steel, and steel products and their sale. Planning at the level of such industrial sub-sectors is expected to result in an efficient functional decentralisation of the process. Along with this, industrial units are also being decentralised on the basis of national, provincial and trans-provincial groupings.

Policy in regard to the energy sector will be of interest. The main emphases here are (a) conservation and avoidance of waste, promoted by strict enforcement of norms (b) conversion of oil-burners to coal and (c) unified power grids both between and within provinces A draft energy law is proposed to be drawn up shortly "to stipulate the criteria for rational exploitation, comprehensive utilisation and saving of energy, as well as a corresponding system of reward and penalties"[7]

Technology

China has now firmly decided on an outward looking policy on the import of technology. This policy as expressed by Premier Hua Guofeng is :

"Economic exchange between countries and the import of technology are indispensable major means by which countries develop their economy and technology. It Is all the more necessary for developing countries to import advanced technology in a planned way in order to catch up with those economically developed. In order to accelerate the four modernisations, while resolutely maintaining independence and self-reliance as our main premise, we must work hard to learn all that is worthwhile from foreign countries, selectively import advanced technology of which we are urgently in need, and not wall our country off from international exchange."[8]

With the introduction of this new policy in 1978, it has been reported that "the volume of business in this field was twice the total for the five years from 1973 through 1977 and involved hundreds of companies from a dozen countries. Import-items contracted are mainly for complete sets of equipment. Some are for individual machines. Mostly they are for the chemical, iron and steel, coal, petroleum and electric power industries. A portion will go to the machine-building, light and textile industries and electronics industry. Some items are for scientific experiments."

It is not unnatural that when the lid was opened after a long period, there should have been many demands from enterprises and State Governments for imported equipment and technology for purposes of modernisation and replacement. It is now widely admitted that in the initial stages, there was something of a spree. According to the Minister of Finance "Importation of new technology was a bit too hasty and the steps taken were not steady enough". In the words of the Vice-Minister in charge of the State Planning

Commission. "Inexperience led us to importing some items too hastly. The import was incompatible with our ability to assimilate and our construction and capacity to provide the ancillary equipment. We are paying attention to putting this right".[9] Or, as Vice-Premier Li Hsien-nien put it "our Ministers have a huge appetite for foreign exchange".[10]

There is now a process of consolidation, readjustment and enforcement of priorities. But there is no change in the basic policy. In regard to criteria for imports, the three main principles are (a) imports should be tailored to the ability to pay for them through increased exports (b) imports should be matched with domestic capacities for providing ancillary equipment, civil construction, supply of raw-materials, semi-proceseed items, fuel and power and engineering capacities and (c) the balance between imports and the capacity to "assimilate" them, in terms of moving from complete equipment to selective pieces of equipment and then on to pure technology imports. "In short, consideration should be given to both necessity and possibility, and the imported projects put into immediate operation"[11]

China is not averse to taking in foreign private investment under acceptable and appropriate conditions. Effective from July 8, 1979 they have adopted a "Law on Joint Ventures using Chinese and Foreign investment", Additional regulations on specific matters to supplement the law are under consideration.[12] The Chinese investment law is a very clearly articulated statement of policy in this matter and one that provides for a good measure of flexibility. Its main features are :

(a) Protection of investments, profits and other lawful rights and interests of investors.

(b) Freedom to repatriate profits, invested funds on termination of the joint venture and the savings of foreign workers.

(c) Investment can take the form of cash, capital goods, industrial property rights etc.

(d) In the registered capital of a joint venture, the proportion of foreign Investment shall in general not be less than 25 per cent.[13]

(e) Reduction of, or exemption from, income tax for the first two to three profit-making years will be available for "joint ventures equipped with up-to-date technology by world standards'. Tax refunds for reinvested profits are also provided for.

(f) Joint venture agreements and contracts have to be approved by the Foreign investment Commission The Commission is required, under the law, to authorise or reject such agreements within three months.

(g) Joint ventures are to be of a limited duration agreed to at the time of their formation by the two parties. The period can be exfended or terminated earlier, by mutual agreement among the parties and with government approval. In other words, after a certain period, foreign equity will have to be divested.

(h) The Board of Directors of the joint venture is to be constituted by agreement among the parties. The Chairman will have to be from the Chinese side but the foreign participants may appoint one or two Vice-Chairmen. The Board has powers to take decisions on all important matters but these will have to be taken on the

basis of consultation (i.e. unanimity) among the parties. At the management level, the General Manager and Assistant General Managers (Chief executive and the next level) can be from either side. The joint venture agreement can also include procedures for the recruitment and discharge of employees.

(i) Conciliation and arbitration are provided for as dispute settlement procedures.If the parties so aqree, the arbitral body need not necessarily be Chinese.

It is, of course, too soon to judge the effect of this law in attracting foreign investment. It has certainly generatad a great deal of interest. China does not see direct foreign investment as a major source of external capital to support its modernisation programme but recognises that often it is not possible to buy technology without accepting capital as well. When this becomes necessary, it is desirable that the foreign investor should have a stake in the success of the enterprise. This appears to be the rationale for the minimum 25 per cent equity requirement and the provisions that enable the foreign investor to participate in higher management. The very fact that China has come forward to have an investment legislation, clearly articulated and flexible in its approach, is an indication of a self-confident policy in this matter. As one Chinese official mentioned to me, it was Chairman Mao who said: "As far as business is concerned, we should do it".

Internal economic management

Having explored some of the new policies in the three modernisation sectors, it might be useful to notice certain features of China's internal and international economic polices. The Finance Minister's statement on the Budget for 1979 and other available documents provide much valuable information.

Price stability is one of the keystones of Chinese Internal economic management. Grain is rationed and a large food subsidy from the exchequer bridges the gap between a fair price to the producer and a reasonable issue price to the consumer.[14] With low and stable food prices it is possible to keep wages also reasonably low and stable. The average wage in industry is now about 650 yuan and in agriculture about 450 to 500 yuan per annum. Demand for manufactured goods is encouraged and met with adequate marketing facilities. There are, for instance, large departmental stores in different parts of Peking. They are open for 10 or 11 hours a day seven days in week and are well-stocked with a whole range of basic consumer goods-groceries, textiles, thermos flasks, radios, sewing machines, cameras, bicycles, watches and television sets. Purchasing power mopped up through the sale of manufactures reflects itself in enterprise profits and taxes paid by enterprises. These are the main revenue sources for the budget. There are no personal income taxes in China nor indirct taxes on consumers. A tax on bicycles which was in force for a long time has been recently abolished.

The key elements of consumption policy in China are thus to keep food prices low to the consumer, encourage production and consumption of food, meat and other agricultural produdts like fruits and vegetables, and of basic manufacturerd goods. The volume of retail sales went up by 8.3 per cent in 1978 over 1977 and this is quoted as an important indicator. Similarly, the annual Plan empasies targets for a variety of conmer goods. For 1979, these are 5.3

per cent for chemical fibres, 8 per cent synthetic detergents, 10.8 per cent for bicycles, 8.6 per cent for sewing machines, 12.7 per cent for watches, 23 per cent for cameras and over 103 per cent for television, sets.[15] Correspondingly, agriculture and light industry enjoy the highest investment priority in the modernisation programmes.

Budgets are balanced and there is no deficit financing. In 1978 there was a small cash surplus. In 1979, revenues and expenditures are estimated to balance at 112,000 million yuan. Expenditure priorities will be apparent from the following broad break-up of this figure :

		(million Yuan)
1.	Capital construction	39,000
2.	Industrial programmes for modernisation, renewal and trial manufacture	21,600
3.	Circulating capital and credit	4,900
4.	Rural expenditures	7,050
5.	Health, education, culture etc	12,080
6.	Defence	20,230
7.	Foreign aid	1,000

The balance between accumulation and consumption is a frequent theme of discussion. Constant readjustment between the two is recognised as being necessary. Private savings are not frowned upon. With the recent increase in rural incomes and industrial wages, there has been a spurt in bank deposits. It was reported, for instance, that bank savings of rural and urban residents of Peking broke all previous records with new deposits in the first seven months of 1979 being double the sum in the City and 67.5 per cent higher in the rural area for the corresponding period in 1978.[16] The rate of interest on time deposits is around 5 per cent per annum.

With all means of production being under public or collective ownership, the State faces a major responsibility for providing full employment. The existence of an unemployment problem is now being admitted and estimates (unofficial) place it at 20 million. About half this number appear to be youth returning from the countryside where they were forced to go during "the days of the gang of four" and the other half, new entrants to the labour force. Employment is reported to have increased in industrial and other establishments by 3.87 million in 1978. The target for 1979 is 7.5 million additional jobs.[17] Experimentation is under way to promote informal self-employment through such means as workers, cooperatives for various trades and skills e, g., construction, repair work, catering, handicrafts and so on.[18] This is an interesting lossening up of policy but it is not clear how far it will contribute to a solution of unemployment in the magnitude in which it exists. The difficulty of the problem is well reflected in the following extract from the Budget speech :

> "Since so many problems have piled up over the years, it is impossible to settle all these "debts" at one stroke. As many economic difficulties still confront our state, increases in wages, salaries and employment can only be gradual, as permitted by the development of production and by our financial and material resources. We are putting the situation squarely before the whole nation, and we are sure the masses of workers and staff will respond with understanding... All factors must be taken into account, and no one can be allowed to go his own way, otherwise new contradictions will ensue".

External economic relations

Reasonably good information is available regarding China's trade and external payments position.[19] In 1978, earnings and expenditures of foreign evchange are reported to have balanced with a small surplus. Exports were at the level of 16,700 million yuan and imports at 18,700 million yuan which would mean that net invisibles (mainly tourism offset by debt service payments) were at the level of 2,000 million yuan. In 1979. exports have been projected at 19,200 million yuan, 14.7 per cent higher, and imports at 24.800 million yuan, 32.4 per cent higher than in 1978.[20]

Exports at around $10 billion are about 2.5 per cent of GNP at about $400 billion.[21] This is low but if we assume a growth rate in GNP of 7 per cent per annum and in exports at twice that rate, exports in 1990 may rise to about 5 per cent of GNP comparable to the present position in other continental economies such as the USA and the USSR. China has so far been largely self-sufficient in food and with its emphasis on agricultural modernisation, food imports, except in a very bad year of drought or floods, are not likely to be an import burden. She is more than self-sufficient in raw materials such as iron ore, coal, non-ferrous metals and oil. There is no room for import of non-essential consumer goods. On the export side, the policy is to promote exports of minerals and metals (compensatory trade linked to capital and technology imports for exploration and development) and a wide variety of manufactures — textiles, handicrafts, light engineering goods, etc. In export promotion, China is interested in seeking avenues for cooperative production with foreign companies, processing exports on the basis of designs and specifications given by buyers abroad and in ways in which it can improve its production, marketing and export competitiveness. It is, no doubt, a late entrant in many markets and items — textiles, footwear, electronics, etc — in which Japan and the ASEAN countries have gained a foothold. But, China's long-term comparative advantage in exports of manufactures will lie in her ability to keep wages at fairly stable, and relatively low levels.

In *international economic relations*, China has been a consistent and vigorous supporter of the New International Economic Order and of positions taken by the developing countries, although she is not formally a member of the Group of 77. China is not a major exporter of primary commodities or an aid - receiving country. Her main interest is in access to markets and trading opportunities in the field of manufactures, China's chief concern, therefore, is protectionism and it is in this area of interest that other similarly — placed developing countries could expect strong support from the Chinese. Although China is herself a developingc ountry, with a per capita income of around $ 400, She has been a generous aid giver. The budget provision for foreign aid in 1979 is 1000 million yuan. In earlier yeats, it has actually been higher when Vietnam and Albania were major recipients of Chinese aid. In quality too, China's assistance to other developing countries is impressive with most of it in grant form and the balance in interest-free loans.[22] As a borrower, China has so far confined herself mainly to export credits from countries such as the USA, Japan, Australia, France and the UK. She is not so far a member of the IMF, World Bank or the Asian Development Bank but one can imagine that in course of time, China's interests and needs will argue for borrowing from international financial institutions as well. Such borrowing may be on market terms

or semi-concessional at the most but not on concessional terms as in IDA credits or bilateral development loans.

Stability, unity and liveliness

It is time to explore the theme of stability, unity and liveliness in spheres of activity other than the strictly economic. One very interesting development in China today is the effort to evolve a legal system based on formal legislation in replacement of one that is based on organic laws and executive decrees. Six basic laws including a criminal law and a law of criminal procedure have been promulgated by the Fifth National Peoples Congress and are due to come into force on January 1,1980. The background to these moves to create and stabilise a legal system has recently been explained by Peng Zhen, Diretor of the Commission for Legal Affairs in the following words:

> "One reason why Lin Biao and the gang of four were able to wreak havoc for a period of time was the lack of a sound legal system, and this was taken advantage of by them. The task now is to improve the socialist legal system step by step so that law-abiding people know what to follow while law-breakers will be duly punished. Now with the laws adopted, and which the public security departments, the procuratorates and the courts strictly upholding and enforcing the laws, careerists and conspirators like Lin Biao and the gang of four will not be able to do what they like." [22]

It is thus interesting that in China legislation is emerging in response to a felt need. The laws themselves are promulgated by the National Peoples Congress after an elaborate process of consultation within the party, the provincial governments and at other levels. In this fashion, law embodies the lessons of experience and is framed with reference to contingencies that can be anticipated; it is not the dead weight of inherited baggage.

In regard to interpretations of the class situation in China, the effort is to de-emphasise the permanence and continuity of class struggle with classes being defined in ideological terms (*cf.* Chairman Mao: " Never forget class struggle") and, instead, to identify class enemies in terms of the specifics of the present political and economic situation in the country. In his report on the work of the government to the Fifth National Peoples' Congress (June 1979), Premier Hua Guofeng pointed out that as classes landlords and rich peasants have ceased to exist and feudal and capitalist systems of exploitation have been abolished.

> "The masters of socialist society are the socialist workers, peasants and intellectuals and those other patriots who support socialism. There are contradictions of one sort or another among them but no conflict of fundamental interests, and the building and growth of socialism is to their common advantage."

There is, no doubt, a residue "of counter-revolutionaries, enemy agents and unreformed landlords and rich peasants" but the new exploiters are "grafters, embezzlers and speculators". In other words, the present real enemies of the people are not so much typological class enemies but functional enemies who seek to disrupt the economy in one way or another. This recalls the Five Evils (wu fan) campaign of Chairman Mao against those who indulge in bribery, tax evasion, theft of state property, cheating on government contracts and stealing economic information and his earlier Three Evils (san fan) campaign against corruption, waste and bureaucracy.

To some extent, such an analysis reverses earlier trends, as for instance, the attacks on Yang Hsien-Chen who advanced the principle of "combining two into one" vis-a-vis that of "one dividing into two". At the same time, Premier Hua does not ignore that while cohesiveness might have to be underlined in a phase of economic modernisation, fundamental social forces and sectional interests will assert themselves and continue to make it necessary that the theme of class struggle should be kept alive. As he says in his Political Report to the 11th National Congress of the Communist Party of China (August 1977) "stability and unity do not mean writing off class struggle.... Throughout the historical period of socialism the struggle between the two classes, the proletariat and the bourgeoisie, between the two roads, socialism and capitalism, continues to exist. This struggle will be protracted and tortuous and at times even very sharp. Political revolutions in the nature of the Cultural Revolution will take place many times in the future". Obviously, in ideology too one has to walk (or rather talk) on two legs and know which one to put forward when.

On bureaucracy, Premier Hua Guofeng has a clear and strong statement which will find echoes in an Indian reader.

> "Nothing but infinte harm will be done to the peoples, cause if leading cadres shirk responsibility in the face of problems, are afraid of giving offence, slough off their duties, do nothing but eat three square meals a day or in the name of democracy, engage in endless discussion without making any decisions or take no action after decisions are made, so that everything gets lost in empty political talk and in the odyssey of official papers... it is one type of bureaucracy characterised by serious neglect of duty to the people. The other type is the placing of oneself above the organisation, acting dictatorially, disregarding objective laws and messing things up by issuing subjective orders. Unless an implacable struggle is waged against these two types of bureaucracy, socialist democracy can not possibly develop...".

Now for liveliness. The central lobby of the Peking Hotel has a red-and-gold scroll of Chairman Mao's words: "We have friends all over the world". In Peking now, this is indeed true. In the two weeks I was there -not representative, one hopes, for the sake of the hard-pressed Chinese hosts - there were the King of Nepal, the Prime Minister of Sri Lanka, Prince Sihanouk, and Vice-President Mondale of the United States ; visting Cabinet Ministers from N. Korea, Norway and W. Germany ; parliamentary and other goodwill delegations from Malta, Sierra Leone, Zambia, Luxembourg, Zimbabwe, Barbados, Japan, Guinea and New Zealand, and sports teams from Mexico, the USA and Thailand not to speak of tourists-mainly from the US, Japan, Australia and overseas Chinese from Taiwan, Singapore and Hongkong; and trade delegations, businessmen and academics. There was a recital of 'poetry from other lands'; an outgoing Chinese delegation on religion attending a world conference on religion and peace in Princeton, New Jersey; a delegation from the Hubei province on a visit to Ohio; the return of the Shanghai troupe of the Peking opera after a four month tour of 19 cities in W. Europe; announcement of a Chinese paper cut exhibition to be held in Norway and Finland; and the opening of the new season of the Peking opera with a repertoire of 100 plays. Premier Hua certainly does not exaggerate when he says that "the prospect of a flourishing

garden of literature and art where a hundred flowers blossom is already before us". New life has also been infused into social science research with the establishment of the Chinese Academy of Social Sciences in March 1978 and the creation under its wing of a number of new institutes.[24]

On the vexed question of Taiwan too there is movement. In his report to the Fifth National Peoples Congress Premier Hua, while calling for Taiwan's early return to the motherland, also hoped that "postal, transport and trade relations between the mainland and Taiwan will be established and that exchanges in the spheres of economy, science, culture and sports will begin as soon as possible". He also said : "People of all walks of life in Taiwan and compatriots from Taiwan residing abroad are welcome to return to the mainland for visits and to meet their relatives and friends. We guarantee them freedom to come and go as they like will give them convenience and guarantee that they will be treated with courtesy"—a policy that strongly recalls the Ostpolitik of Mr. Willy Brandt as Chancellor of the Federal Republic of Germany towards the German Democratic Republic.

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These are notes. Their purpose is to record certain impressions which could stimulate an interest in China, an interest which fortunately can be sustained with the flow of information that is now beginning to be available. Prognostications may be out of place in such an exercise. But, we have to notice two types of "concerns" that professional China-watchers suffer from. One is worry about ideological backsliding[25]: will not the new incentives lead, in course of time to inequality, consumerism and even a parellel economy? Will not rapid and ambitious mordernisation put a premium on professional and technical elites who will demand and obtain special privileges i. e. is it possible to be both 'red' and 'expert'? Can bureaucratism be kept under control? and so on. The other type of questions, while related to the first, are rather more at a technical level. Will China be able to contain unemployment? tackle her problems of planing and enterprise manage ment? achieve balanced regional development? maintain a viable balance in external payments? contain defence expenditures?

Time alone will tell. But one cannot resist the feeling that the Chinese are ideologically alert and managerially sophisticated. They do not seem to reflect either the euphoria of those who see the new policies as a move "towards market forces" or share the gloom of those in whose eyes the same policies are "retrograde and revisionary." As in all real-life economies, China is bound to face problems of one sort or another to a greater or lesser degree, in the management over time of its vast and complex polity and economy—problems of employment, planning, defence expenditures and the like. The Chinese more than many others can be confident of over-coming them for a variety of reasons. They have solved the land problem, socialised the means of production and have a truly People's Army and a Party which intermediates at many levels between the people, the cadres, the military and the political leadership. With such a secure command of the, base, their experiments and readjustments with the super-structure are likely to strengthen rather than weaken the foundation of an essentially Chinese model of Communism. China was the "Middle Kingdom" and if anybody can successfully pursue the Middle Way reconciling enterprise with equality it will, perhaps, be the Chinese people and their leaders. It will not be a straight and easy path. We ought to wish them well.

Notes and References

1. For good introductions, see Joan Robinson (1961) *The Cultural Revolution in China* and Japp Van Ginneken (1976,) *The Rise and Fall of Lin Piao.*

2. Premier Hua Guofeng(August 1977), *Political Report to the Eleventh National Congress of the Communist party of China.*

3. For instance Alexander Eckstein 1977), *China's Economic Revolution* and Henry J. Groen and James A. Kilpatrick, 'Chinese Agricultural Production' in *Chinese Economy Post-Mao* Volume I: Policy and performance, a compendium of papers submitted to the Joint Economic Committee of the US Congress (November 1978).

4. The figures are from Premier Hua Guofeng's *Report on the work of the government*. June 18, 1979 to the second session of the Fifth National Peoples' Congress. Subsequent quotations from him are also from this source.

5. These and other quotations from Zhang Jingfu, Minister of Finance of the People's Republic of China are from his *Report on the Final state accounts for 1978 and the draft state budget for 1979* delivered on June 21, 1979 to the second session of the Fifth National People's Congress.

6. *Report on the draft of the 1979 economic plan* delivered by Vice-Premier Yu qiuli on June 21, 1979 to the second session of the Fifth National People's Congress. The income of commune members in the same period went up by 13.7 Cent.

7. *Ibid*

8. Interview with Gu Ming, ViceMinister in charge of theState Planning Commission, *Beijing Review* July 27, 1979. There have been three main periods in the past when China imported complete plant and equipment : in the early 1950s from the Soviet Union, in 1962-65 from Japan and W. European countries (nearly 80 projects) and in 1973-77 again from Japan and W. Europe (nearly 200 projects)

9. *Ibid.*

10. See 'China slows tempo of certain projects' in International Herald Tribsune, March 2, 1979.

11. Gu Ming, op. cit.

12. Statement of Vice-premier Gu Mu reported in Xinhua News Agency August 22, 1979.

13. Zou Siyi, a leading member of the Ministry of Foreign Trade in an interview published in *Beiling Review* of April 27, 1979 has clarified that foreign investment will be restricted to 50 per cent. There is, however, no ceiling as part of the law.

14. The cost of the subsidy to the Budget is not known but the Budget speech indicates that the 20 per cent increase in the purchase price given this year will cost 6,500 million yuan. Assuming, from some indications that I received, that the cost of the subsidy is of the order of 25 per cent of the (new) purchase price, the overallcost to the exchequer may be of order of 9,000 to 10,000 million yuan. While this may not be a precise estimate, it will be clear that the food subsidy is of a significant magnitude.

15. Yu qiuli, op. cit.

16. Xinhua News Agency, August 22, 1979.

17. These are the budget figures.

18. Article by Xue Muqiao, Adviser to the State Planning Commission in *Beijing Review*, August 17, 1979.

19. Richard E. Batsavage and John L Davie, China's International Trade and Finance in *Chinese Economy Post-Mao op. cit.*

20. Yu qiuli, *op cit*.

21. The *World Development Report, 1979* of the IBRD gives $390 as China's GNP per capita in 1977

22. Carol Fogarty, Chinese relations with the Third World in *Chinese Economy Post-Mao* will be of interest on this aspect of China's external economic relations. Also, Address by Liu Xiwen, Chairman of the delegation of the Peoples Republic of China to the Fifth session of the UN Conference on Trade and Development, Manila, May 1979.

23. Peng Zhen on strenghening the legal system in *Beijing Review*, August 17, 1979.

24. For a detailed account see Manoranjan Mohanty, China : Social Sciences on a New Footing. in **Economic and Political Weekly**, August 25, 1979.

25. See issues of **Monthly Review** on China since Mao (Summer, 1979) and Special China Issue (May, 1979) for an extensive discussion of these aspects.